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ABSTRACT

This document, the first of two volumes, contains papers that represent recent work in career development research at Harvard University. The purpose of the papers is to review, clarify, and offer a critical commentary on several issues crucial to current research and to emphasize a point of view from which important resources of conceptual analysis can be brought to bear on the issues. Section I, Developmental Context, and Section II, "Stock Taking" include the following chapters: (1) The Harvard Studies in Career Development: Retrospect and Prospect, (2) Decision and Vocational Development: a Paradigm and its Implications, (3) The Self-Concept: A Critical Analysis, (4) Self as Process, (5) The Self-Concept: A Construct in Transition, (6) From Self-Concept to Personal Determination in Career Development, (7) Occupational Psychology and Guidance in Education; Foundations For a Language in Career Development, (8) Personally Determined Career and Entrepreneurial Behavior: Annotated Texts and Contexts, (9) Current Findings: Precursors of New Directions, and (10) Creativity and Career. Volume II, a continuation of these papers, is available as VT 013 233. (GEB)

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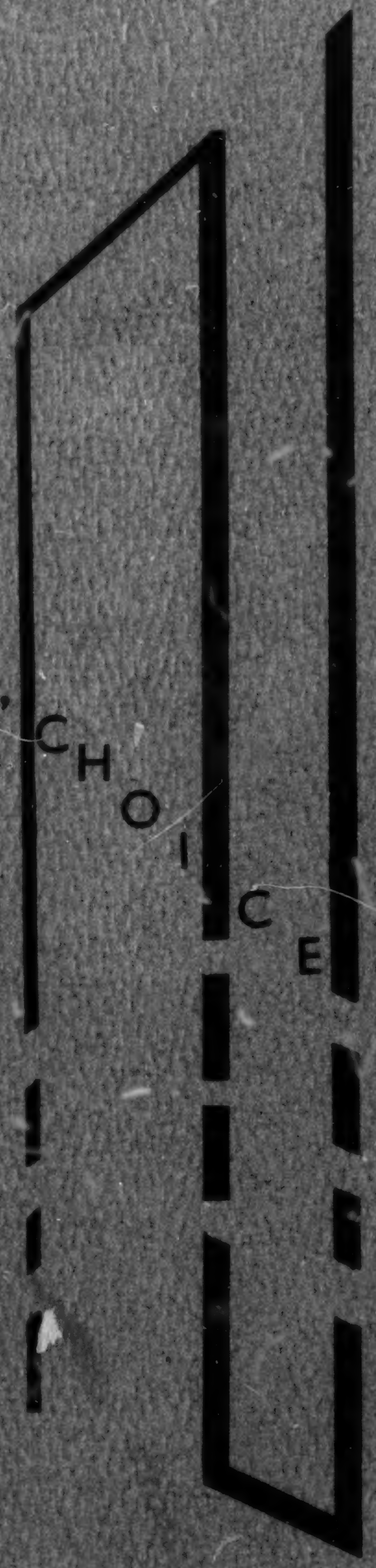

THOUGHT, CHOICE and ACTION:

PROCESSES OF EXPLORATION AND COMMITMENT IN CAREER DEVELOPMENT

by:

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> "What matters here from the point of view of method is that an act of choice is only of symptomatic significance, is expressive of something only if we can reconstruct the choice situation."
>
> E. H. Gombrich, *Art and Illusion*

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PREFACE

Our aim is both to integrate and to make more widely available a collection of papers representative of recent work in career development research by the senior author, David V. Tiedeman, and his colleagues and students at Harvard University. By assembling our papers in this form we have sought to review, clarify, and offer critical commentary on a number of themes and issues which in our view are crucial to current research not only at Harvard but at other important centers of work in career development. We have attempted, furthermore, to emphasize, both through the organization of the papers and through our commentary, a point of view from which important resources of conceptual analysis can be brought to bear on those themes and issues.

This collection of papers thus provides a progress report on the Harvard Studies in Career Development. It places a 1963 monograph by Tiedeman and O'Hara (Career Development: Choice and Adjustment) in a somewhat broader context of discussion-- first, by tracing developments in theory and data which led to that seminar document which was published coordinately and simultaneously with a similar document by Professors Donald E. Super and Jean Jordaan under title Career Development: Self Concept Theory (1963); second, by including statements of work carried forward since its publication; and, third, by providing extensive critical review and commentary.

In addition, this volume represents a statement of conceptual orientation that provides the theoretical basis of a major research effort currently under development at Harvard: the Harvard-NEEDS-Newton Information System for Vocational Decisions, which is described in Chapter 12.

We feel that such a book is timely with respect both to the growing concern for radically revised and improved programs of vocational education and to the current efforts to rethink the basis of vocational guidance. More important still, we view this collection of papers as consistent with the need to integrate such topical concerns of policy and action with broader analysis of professional responsibility within the structure and process of education.

Our primary assumption is that a developmental perspective regarding the organization of human thought and action remains crucial to more informed and successful efforts to teach, to guide, and to counsel. This notion is neither new nor especially radical. The research issues which it entails, however, are as theoretically complex as they are pragmatically significant. We might anticipate, therefore, that any resonsible investigator is wisely advised to confine his published consideration of such difficult issues to the most carefully delimited and polished efforts of which he is capable. Such an inference is, however, inconsistent with an important tenet of our outlook. For the commitment to a developmental perspective presumed by the theory toward which these papers move requires, instead, a more widely shared and reasonable assurance in dealing with the process of inquiry itself. Our commitment to the values as well as the risks of exploratory studies, first approximations and working papers is, we trust, made clear early and throughout this collection. Papers by Kehas (Chapter [illegible]), Field (Chapter 4), and Dudley (Chapter 10) written during the time that their authors were degree candidates at Harvard are, for example, included without either special apology or commendation. In brief, it is our intention to encourage, through specific and extensive example, a freer sharing of and commentary upon the actual process of collaborative initiative that emerges from the mutual education of professor and student. It is through the documentation of that process that we anticipate a collection such as this to offer a useful resource as textual or collatoral readings in graduate courses devoted to informed analysis of issues in the fields of educational guidance and career development.

The papers of this collection are assembled in five major sections. Section I provides the necessary background by tracing prior trends in theory and practice within the Harvard Studies of Career Development. Chapter 1 begins with a review of Tiedeman's original emphasis on a particular method of data analysis, the discriminant function, and outlines its application to issues of educational and vocational membership and choice. It emphasizes the major puzzlements that emerged from this initial pattern of research: the serial ordering of personal choices and alternatives and the identity of persons as choosers. Subsequent chapters of this first section then trace the developments in our background of research as the Harvard Studies in Career Development moved toward issues of self-concept, persons as agents in the creation of alternatives, processes of personal choosing, and, finally, the languages of human purposing, personal responsibility, and professional intervention (Chapters 2-5).

Section II documents the period of stock-taking that characterized our studies from 1963 through 1965. In Chapter 6 we discuss movements in theoretical orientation from an emphasis upon self-concept theory to an emphasis upon the specific processes of personal determination in career development. In Chapter 7 we review current points of view and research strategies which characterize the psychology of vocational behavior and, in addition, outline the foundations for a more adequate "meta-language" of career development. Chapter 8 provides a general commentary on the conceptual implications of this shift in recent work. Our documentation of this period of review and commentary concludes with an emphasis in chapters 9 and 10 upon symbolic processes of imagination as creative aspects of ego synthesis in the patterning of career development and personal responsibility.

Section III outlines the new directions in conceptualization which derive from the preceding period of stock-taking and which provide, in turn, the theoretical basis of work since 1965. In chapter 11 we review these new directions in Career Pattern Studies at Harvard. Chapter 12 is devoted to a presentation of the Harvard-NEEDS-Newton Information System for Vocational Decisions, while chapter 13 outlines procedures for charting specific aspects of imagination and preconscious mental processes in the service of personal knowledge. Chapter 14 concludes this section with a brief consideration of issues of mediation and media in information and education. Throughout Section III the specific issues of current work are reviewed within a broad context of continuing discussion regarding (1) the logics of confirmation and exploration, (2) unconscious, preconscious and conscious aspects of personal knowledge and reflective experience, and (3) a notion of temporal patterning in career development as a model of knowledge invoking the "presence" of the past in the potentiality of the future.

Section IV consists of a single chapter designed to outline in further detail the general perspective regarding personal knowledge reflected throughout the individual papers of the collection. This statement begins with a discussion of a number of current behavioral models vis-a-vis what we view to be the central issues regarding individual purposing and the structure of human events. This statement addresses the languages of human conduct and the conduct of human inquiry as reciprocal dimensions of activity reflecting three fundamental modes: (1) literal, (2) metaphoric, and (3) analogical. There is in addition a consideration of the relationship between scientific revolutions, personal transformation, and reflective experience. The chapter concludes with a brief epilogue devoted to the process of "perspective by incongruity."

Section V considers the professional implications of our general discussion. Based upon recent addresses of Tiedeman's, the three chapters of this section give successive emphasis to (1) the specifics of vocational-technical education, (2) a general concept of liberation through education, and (3) a review of the strategies and tactics and vested interests of professional collaboration--as it presently exists and might become.

The fact that in this book Tiedeman's thought is frequently treated as an object of analysis while he is also a co-author occasionally produces copy which may seem stilted. In addition, asking you to "listen" to Tiedeman as you read Section V may seem a needless burden to impose on a reader. However, we trust that you, the reader, permit us this seeming stiltedness and imposition since it is provided for your benefit. One benefit should be the increased ease with which you can separate those aspects of Tiedeman's thought which are under revision from those aspects of our joint thought which are herein stated as if they were more explicitly established. Another benefit should derive from your direct experience, through this form of address, of the very theme which we propose as crucial to further study of career development. In short, we attempt to share intuition in order to illustrate the process of being intuitive which we advocate for study in furthering the understanding of language in science and life. And the process of being intuitive, we believe, requires one to "listen" to several "voices" at once as he reads and thinks.

Tiedeman's is not the only thinking which is analyzed in this book. Our joint efforts here spring from explorations shared by Tiedeman with Henry Borow, University of Minnesota, Jean Jordaan, Teachers College, Columbia University, Robert O'Hara, Harvard Graduate School of Education, Donald Super, Teachers College, Columbia University, and Ted Volsky, University of Colorado. All these persons discussed career development in a seminar supported by the College Entrance Examination Board during 1962-63. Our mutual regard for each of these colleagues is considerable. Each is a leader in his own aspect of career development research. Nevertheless, this book brings published aspects of the thought of three of these persons under analysis just as Tiedeman's thought is. Our analyses of these individual contributions are presented here as instrumental to the major advance portrayed in this book: one in which our joint thought moves that of Tiedeman from its 1962-63 understanding with O'Hara of a new model for vocational decision-making to its present condition in which the processes of exploration and commitment during vocational and all types of decision-making are more fully analyzed. The fulcrum of this argument is provided by what Tiedeman and his students, Frank Field and Chris Kehas, conceived to be Jean Jordaan's and Donald Super's 1962-63 understanding of self-concept. This focus permits Tiedeman to take a step necessary in science, namely the contrast of one concept with another for the reason of understanding conceptual distinctions which could well suggest empirical tests for settling aspects of disagreement among those concepts. This step has not previously been taken with the work of Super and Tiedeman sponsored by the College Board although both Super and Tiedeman conceived this possibility in planning the seminar.

This book emerged from discussions with many persons. Some of those discussants, Frank Field, Wallace Fletcher, and Chris Kehas, make their own contributions in the book itself. However, there are many of Tiedeman's former students whom he here anonymously thanks by acknowledging their great gift of letting him be a student with them.

This book emerged also with a good deal of institutional help. Dudley is indebted to the Harvard University Bureau of Study Counsel and its Director, William G. Perry, Jr., for support and stimulation. Both of us are similarly indebted to the Center for Research in Careers and the Harvard Graduate School of Education. In addition, Tiedeman acknowledges his good year at the Center for Advanced Study in the Behavioral Sciences, the year during which the central ideas of transition found in this book took form and beginning substance. These institutions were the organizations which provided colleagues and encouraging work environment. Behind each of them stands several financial angels. Harvard University and the National Institute of Mental Health financed both the year of Tiedeman at the Center for Advanced Study in the Behavioral Sciences and our joint work at the Center for Research in Careers. The United States Office of Education currently finances the Information System for Vocational Decisions, the System which gave rise to this manuscript itself and which will use this statement as theory for its emerging computer-based system for education.

The Harvard Studies in Career Development were the invention of Tiedeman. These studies later became a resource of the Center for Research in Careers when it was founded. The Harvard Studies in Career Development thereby became more than the work of Tiedeman and his students; they became the work of the Directors, Research Associates, and Research Assistants of the Center for Research in Careers. This book acknowledges this fact but singles Tiedeman's work out from the now more general work of the Center. By doing so, we trust that at least one contribution of the Center for Research in Careers will receive further public acknowledgement. The Center for Research in Careers was the prime agency for realization by Tiedeman of the transition portrayed in this book. Therefore, Tiedeman particularly wishes to acknowledge his debt to the liberal policies of the National Institute of Mental Health which provided several years of individually guided study, the kind of study ordinarily most profitable for the general advance of knowledge.

David V. Tiedeman
Gordon A. Dudley

Cambridge, Massachusetts
Eugene, Oregon

September, 1967

SECTION I

DEVELOPMENTAL CONTEXT

Overview

This section documents the series of research investigations initiated as the Harvard Studies in Career Development. The papers included in this section represent the developmental context from which emerged Career Development: Choice and Adjustment (Tiedeman and O'Hara, 1963). In addition, these papers report on investigations subsequent to their College Entrance Examination Board "seminars" with Henry Borow, Jean Jordaan, Donald Super, and Ted Volsky which gave rise to that monograph. They, thus, serve to outline the issues of conceptualization and research strategy which represent the focus of work during the period of "reassessment" reported in Chapter 2. It is those issues which, in turn, set the stage for the current projects to be presented in Chapters 3 and 4.

The Harvard Studies in Career Development comprise a background of work consisting of three major phases: these studies began in 1949 with the development by Joseph Bryan (1950) of a particular method of statistical analysis: the multiple discriminant function. The second stage consisted of a series of studies in which this method of analysis was applied to the results obtained from studies of occupational choice and membership. Those studies in application led, in turn, to a third stage during which more central consideration was given to the "self-" concept as a crucial issue implicit in personal processes of educational and occupational choice and membership.

In abstracting for particular emphasis here the central pattern of development represented by these fifteen years of research under the aegis of the Harvard Studies in Career Development, we note, in review:

1. 1949: Development of an important new method of analysis: the multiple discriminant function.
2. 1950-1959: The structure of vocational development as a function of the patterning of choice and membership: studies in the application of a particular method of analysis.
3. 1960-1962: From statistical analyses of particular indices of past choices to a conceptual analysis of the issues implicit in the assumption that a choice implies a chooser: studies in "self-concept"
    a) the self-concept as a process of self-construal
    b) self construal as a process of experience, cognitive style, and specific processes of choice within particular situations.

The papers of this section conclude with an anticipation of the issues which become the center of subsequent attention, issues which become the focus during the period of reassessment of the next two years: issues concerning the foundations of a language of individual purposing, agency, and commitment within the science of career development.

CHAPTER 1

THE HARVARD STUDIES IN CAREER DEVELOPMENT: RETROSPECT AND PROSPECT*

Overview

This chapter reports on the 1950 decade of research conducted under the aegis of the Harvard Studies in Career Development. Tiedeman begins by documenting briefly the original work which led to the development of the multiple discriminant function. Next, he reviews a number of examples from the series of studies in which this method of statistical analysis was applied to questions of educational and vocational choice and membership. Then he outlines the issues which led to a beginning harmonization of method and application through a psycho-social conception of career development. Finally he raises the question as to whether, from the perspective of such a psycho-social theory of career development, we need have any real interest in predicting the occupation that a person will pursue. It is this question which leads directly toward the paradigm of decision as a more appropriate frame of reference through which to view the processes of career development. Tiedeman's paradigm is outlined briefly at the conclusion of this first paper and then presented more formally in the following paper.

Thus, beginning with the development of a new method of statistical analysis which was then applied to issues of career choice within a context of research which assumes the probabilities of contingent prediction to be the model of scientific explanation, this initial statement of Tiedeman's concludes with a first approximation of an alternative paradigm of analysis implying a significantly different basis for the conduct of scientific inquiry and explanation. This new "paradigm" of analysis presumes, in brief, the assumption that the act of personal choice and commitment can be both an implicit foundation as well as an appropriate object of scientific inquiry and educational innovation. This initial paper, thus, not only introduces the context of research from which the papers of this collection emerge, but, in addition, it presents the issues which remain central to subsequent explorations.

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* This chapter is based on a 1960 paper by David V. Tiedeman circulated under title of "The Harvard Studies in Career Development: A Current View in Retrospect and Prospect" (Tiedeman 1960)

The Seal of Harvard Studies in Career Development

The seal, "Harvard Studies in Career Development" was first affixed to a published manuscript in 1952.* The advantages of that seal are several. It focuses interest without being too restraining and it permits both collaborative and individual activity.

The seal has its disadvantage too. The considerable interest in career development so liberally represented on the Harvard scene is not now encompassed by the seal and probably neither could nor should be so encompassed. Thus, I must apologize for my audacity in presuming to speak for Harvard and to note that, to my own knowledge, at least Doctors Carroll, Cogan, Goethals, Gross, Hummel, Levinson, McArthur, McClelland, Moment, Roe, Rulon, Shaplin, Stouffer, and Taguiri are others who have also studied career development at Harvard.

Method Calls the Tune

Originally, the Harvard Studies in Career Development were concerned largely with method in the prediction of group membership. The multiple discriminant function resulted from an interest of mine which Rulon had originally stimulated. The solution of this classificatory type of problem is itself due to Bryan (1950) although his work later proved not to be the first. Rao (1949) and Tukey (1949) had preceded Bryan in attaining a solution. Under the leadership of Professor Rulon, King (1958), Knapp (1959), Langmuir (Rulon et al., 1967), Lohnes (1960), Schweiker (1954), and, particularly, Tatsuoka (1957) subsequently elaborated Bryan's statistical contributions in several ways, however. In addition to all of these men, Cass (Cass and Tiedeman, 1960), Dunn (1959), French (1959), and Sternberg (Tiedeman and Sternberg, 1952) became involved in the exposition of the statistical innovations and in the process of considering their implications for a theory of career development. Because of these methodological efforts as well as those at other institutions we now:

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* And the first "seal" was actually that of "HARVARD STUDIES IN CURRICULUM CHOICE" (Tiedeman and Sternberg, 1952). This "seal" became that of Harvard Studies in Career Development with the second paper by Tiedeman and Bryan (1954).

1. Have a method of discriminant analysis with and without recourse to the multiple discriminant function itself as well as significance tests for several general and very useful kinds of multivariate hypotheses;
2. Can readily compute some of the statistics of multiple dispersion analysis for many problems of large size;
3. Have explored and described many problems of profile interpretation in relation to discriminant analysis (Rulon et al., 1967) (Tiedeman and Bryan, 1954);
4. Have made necessary logical distinctions and linkages between discriminant and regression analyses and have several numerical examples of relevance to a growing theory of career development, and;
5. Have made a tiny ingress on the problem of isolating mixed series of multivariate data presuming a typology.

Application of Method

The original preoccupation with method for predicting educational and vocational choices led to various attempts to use the method. Cass (Cass and Tiedeman, 1960), Kugris (Kugris and Tiedeman, 1959), and Sternberg (Tiedeman and Sternberg, 1952) focussed their efforts on the differentiation of curricular choices in secondary school. Cole (1958), Dunn (1959), French (1959), King (1958), Tatsuoka (1957), Tiedeman and Bryan (1954), Walston (1959), and Wilson (1959) attended to differentiation of college majors. French (1959) joined with Tiedeman, Rulon, and Bryan (1951) in efforts to predict occupational choice. Out of these studies grew the conviction that:

1. The educational and vocational choices of men and women do in some small way associate with the scores those people make on aptitude tests; but
2. Such choices are more firmly rooted in the sex role, family role, and self as such effects are manifested in tests of interest and personality.

Method Challenged by Use

"Suppose you can predict choice; so what?" "Ought we use such information?" "Are we merely reinforcing the status quo by so doing?" These questions jarred our satisfaction with method; and Cole, Kugris, Tatsuoka, and Wilson attempted to answer them. Cole (1958) and Wilson (1959) tried to ascertain whether multivariate distributions of scores on vocationally relevant tests become more homogeneous as time passes and, presumably, as a person's choices become more fixed. Unfortunately, in similar but not identical college contexts, the multivariate test score distributions so analyzed both did and did not become more homogeneous. Hence, this problem required more study.

Kugris (1959) asked counselors to relate aptitude to opportunity for self expression, as represented in various secondary school curricula, by assigning student profiles to curricula. The counselors were found to use their own system of relationship consistently. There was also some consistency among the systems of the counselors with respect to the roles they allotted to scholastic aptitude in curriculum assignments. However, counselors were *not* in accord regarding the *level* of aptitude required by the various curricula. Kugris' procedure seems worthy of more extensive use as we struggle with the question of *what* we intend *for whom* in school. Tatsuoka (1957) derived and evaluated a joint index of choice and of success in a group. This index is of considerable value when it is appropriate to perform one's duties in terms of an arbitrary but necessarily fixed level of success within a group.

A Harmonization of Method and Use

As method and use came more to mind, four things happened to the Harvard Studies in Career Development:

1. Our interest in the *category* chosen was broadened to include the *choice and* its persistence;
2. We began more carefully to examine and to test theories of self and of identity for conceptions of relevance for career;

3. We started to crystallize a psycho-social theory of career development; and
4. We renewed our interest in developing a model for predicting linked choices or sequences of choices.

Persistence of Choice. Kibrick (Kibrick and Tiedeman, 1959) made a reasonably extensive investigation of the persistance of the desire to become a nurse over the first six months of study in a hospital school of nursing. Persistance of interest in nursing was largely related to the amount of consistency originally existing between a student's and her superiors' conceptions of the nurse and of her role. While many relationships were significant, no outstanding effect appeared consistently among the data for the seven schools of nursing in the investigation. Walston (1959) obliquely contributed to this area with his discovery of the interdependence of self image, framed autobiographically as a college freshman, and concentration in college two years afterwards.

Self Identity, and Career. At the outset, both Ginzberg's (Ginzberg, et. al., 1951) and Super's (1953) theories of occupational choice, and the personality theory of Carl Rogers (1951) occupied our attention as we probed for newer comprehension of career. O'Hara (1957) has a paper utilizing Rogers' theory both to integrate known data about career development and to develop new hypotheses in the area. Another paper by O'Hara (1959) considers talk about self in relation to Ginzberg's theory of occupational choice. This small exploration of the way youth of various ages address themselves to a statement of self in the world suggested several variants on Ginzberg's themes, particularly with respect to differences in his so-called "fantasy" period.

Progressive clarification, through four grade levels, of vocationally relevant self concepts was reported by O'Hara and Tiedeman (1959). In another study, O'Hara obtained tentative results suggesting that continuation in a highly selective independent school for boys depends upon the degree of correspondence of the boy's estimates of his abilities, interests, and values with those provided by tests. Walston's (1959) study clearly demonstrated the dependence of a choice of curriculum in college upon the personal style one may detect in autobiographies the students write upon arrival. Truly, vocational choice seems a part of the emerging cognitive structure of the self in relation to the world.

The writings of Erikson (1959) have been studied in an effort to consider career in relation to the development of ego-identity. We are particularly struck both by Erikson's concern for the group's "inner coherence" within which the person's "inner core" searches for confirmation and by the "phase specific" developmental crisis, e.g. trust, autonomy, that must be differentiated and reintegrated successively on the basis of an "epigenetic" ground plan. Although we may will still speculate about the specific tasks relevant in career development, the model itself appeals. Particularly intriguing are the simultaneous postulations of expectations, their serial ordering, their interdependence, and their metamorphoses. Reliance upon the analysis of observations alone is not likely to detect a process of the kind Erikson presents. And since we seem to need a similar model of career development, it may prove useful to be a bit less empirical and a bit more fanciful for a while.

A Psycho-Social Theory of Career. Ginzberg and his associates stressed the developmental nature of their findings. Our position, while not denying Ginzberg's approach, is that among the social forces the school system is of primary importance in the ordering of the stages. This statement was first made in a review (Tiedeman, 1952) of the book by Ginzberg and colleagues (Ginzberg, Ginzber, Axelrad, and Herma, 1951). The recent work of Gribbons (1959) and Katz (1960) tends to support our position. It would also seem logical that the sequence and emphases in the development of vocational self concepts presented by O'Hara and Tiedeman (1959) could be changed if one were to introduce specific guidance procedures. We are inclined to think therefore that career development is not isomorphically related to general developmental psychology. Our concern for the influence of guidance procedures within the educational setting has led us to conclude instead: (1) that the stages can be ordered by guidance methods, (2) that preeminences of developmental stages can be flattened or made to rise earlier to some extent, and (3) that trends can be given new direction or even reversed.

Several years ago we decided that a separate theory of career development was needed for men and women and chose to concentrate on a theory for men. Matthews (1960), however, has completed a rather extensive investigation of women's attitudes about marriage and career in relation to their age, educational inclinations, and life plan about marriage and career.

The paper with Matthews (Matthews and Tiedeman, 1964) brought into Harvard Studies in Career Development propositions about self theory, identity, and sex role in career development and stated our interest in positional rather than occupational choice. A concern for choice of position raises all kinds of doubts about occupational classification. Utterly personal elements of work in life become important; career becomes something in a person as well as a course outside of him. From this viewpoint, the thema and thematic extrapolation procedure, sketched by Super (1957) become credible and important. The subject's structure of work becomes crucial for his presence in one or another job or even occupation. The subject's structure of work is the gyroscope directing his career. So thought Field who was then one of the emerging crop of students itching for a problem to find him. (See Chapters 4 and 5 for his contribution as it developed). In directing the subject's awareness into limits this and other cognitive structures may be placing upon his attainment and in acceptance of the unchangeable givens and self-inflicted containment of self, probably lies the purpose for much of guidance. What classification of occupations yet devised for the purposes of census, employment, manpower, socio-economic status, or even career has the needed properties? None of which we know.

We might strive to gather together positions according to the personal styles they tolerate. Such classifications would have to be only temporary of course because they would depend upon the images of the positions held by the incumbents of counter positions and by the purposes of the organization, both conditions which can well change. Is it possible that we need have no real interest in predicting the occupation a person will pursue? This is a foundation-shattering doubt to introject into a report of Harvard Studies in Career Development.

However, the theme of this book takes us from this question to a detailed consideration of the potential operation of personal style in activity, including vocational activity.

Models. This brings us to the fourth changed aspect of the Harvard Studies in Career Development, our model b. In reality the model is little but a paradigm of decision (Tiedeman, 1961, and Chapter 2). The paradigm does, however, represent a cognitive structure within which we find it possible to define, comphrehend, and speculate upon career. The paradigm provides for:

1. Anticipatory choice, and adjusting predispositions in relation to a point of vocational decision;
2. The possibility of seven distinctive phases in connection with every decision;
3. A system of cognitive "fields" accessible in relation to goal which the person can consider, organize, and use to select among available alternatives;
4. An interplay of experience both imagined and tested which is freely accessible in any stage of any decision in so far as each has progressed at the time; and
5. Successive differentiations and reintegrations of self in relation to each decision and its aftermath.

Who uses this paradigm consciously? How? When? What are the consequences of its use and non-use? These are important questions. As we answer them, we shall comprehend career development a bit more. Of one thing we remain convinced, however. We have career development in our grasp when we consider it to be a transaction of "me and thee". We don't have it in our grasp when we turn to immediate empirical analysis in relation to a predetermined criterion even if that criterion be as complex as the work history. It is time to start working out from our object, the career, rather than back upon it from arbitrarily, and perhaps nearsightedly, determined possible uses and needed consequences. Despite this latter statement, however, the Harvard Studies in Career Development are now pretty thoroughly grounded in a context of simultaneous consideration of theory, method, and use. We expect that we shall hit upon stable propositions more readily from this triple base.

CHAPTER 2

DECISION AND VOCATIONAL DEVELOPMENT: A PARADIGM AND ITS IMPLICATIONS*

Overview

This paradigm of the structural differentiations through which the process of decision takes place provided the general rationale of the College Entrance Examination Board monograph, Career Development: Choice and Adjustment (Tiedeman and O'Hara, 1963). And, as indicated, it has remained an important dimension of subsequent conceptualization throughout the research reported in this book. Furthermore, it is frequently the central reference upon which other students and investigators have formed their assessment of the logic of Tiedeman's approach to career development. Finally, it provides a clear baseline position against which to assess the ideas to be developed in the subsequent papers of this first section.

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* This chapter, except for its overview and more recent editing, was published by David V. Tiedeman underthis title in the Personnel and Guidance Journal, 1961, (40), 15-21. Tiedeman is indebted to Robert P. O'Hara and Edward C. Scanlan for many of the ideas set forth therein.

Needed: the Structure of Decision

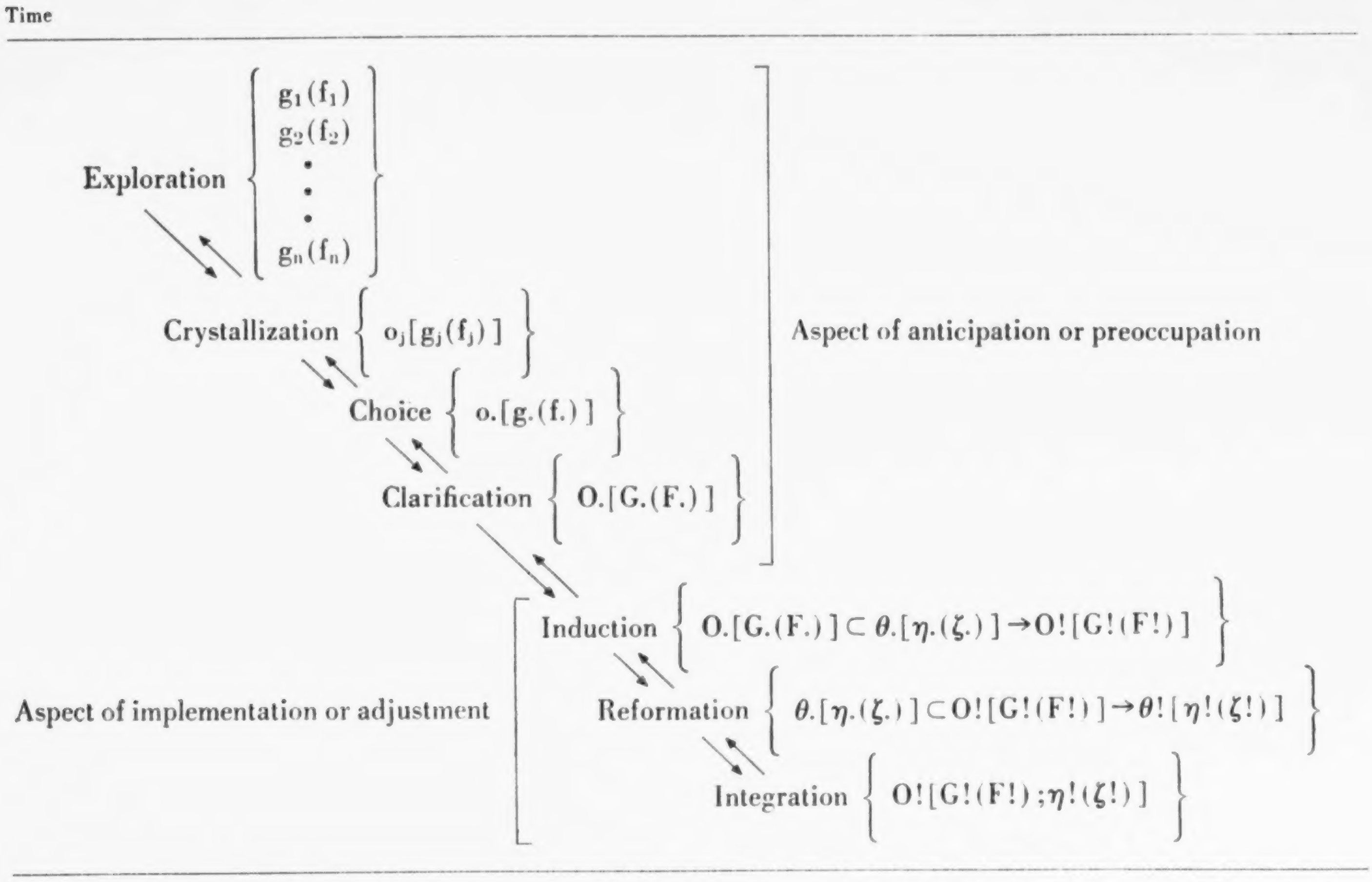
For almost 50 years the vocational psychologist has attempted to view vocational development through the keyhole of success in educational and vocational endeavors. Career is practically invisible from that angle of vision. The career is more apparent in relation to vocational interests. Still more of career is apparent in relation to educational and vocational choices. Ultimately, however, we must view career in terms of vocational development as Professor Super does in his text (1957) on the subject.

Super's writings about vocational development (Super, 1957; Super and Bachrach, 1957; and Super, Crites, Hummel, Moser, Overstreet, and Warnath, 1957) provide a clear outline of its process and its investigation. However, we still need an explicit statement of the process of decision in vocational development. The structure of decision must be specified before investigations of the theory of vocational development can enter new phases.

Decision and Vocational Development

The compromise inherent in discovering and nourishing the area of congruence of person and society as expressed in an individual's vocational behavior is effected within a set of decisions. The set of decisions and the context of relevance for the anticipation and implementation of each constitutes the essence of vocational development. The purpose of this chapter is to attempt a formal statement of this proposition, a statement sufficiently specific to make it amenable to investigation.* The structure is represented symbolically in Figure 2.1, but needs further elaboration.

A paradigm of the processes of differentiation and integration in problem solving


Time
Exploration
$g_1(f_1)$
$g_2(f_2)$
$g_n(f_n)$
Crystallization
$o_j[g_j(f_j)]$
Choice
$o.[g.(f.)]$
Clarification
$O.[G.(F.)]$
Aspect of anticipation or preoccupation
Induction
$O.[G.(F.)] \subset \theta.[\eta.(\zeta.)] \rightarrow O![G!(F!)]$
Aspect of implementation or adjustment
Reformation
$\theta.[\eta.(\zeta.)] \subset O![G!(F!)] \rightarrow \theta![\eta!(\zeta!)]$
Integration
$O![G!(F!);\eta!(\zeta!)]$

Legend:
g_j, G_j represents goal when conceived and then clarified ($j = 1, 2, \ldots, n$)
f_j, F_j represents psychological field when conceived and then clarified ($j = 1, 2, \ldots, n$)
η (the analogue of g) represents goal the group holds for person
ζ (the analogue of F) represents the psychological field defined by the group
o_j, O_j represents organization as conceived and then clarified
θ_j represents the analogue of O_j in the group, that is, the cumulative effect of the O_j's of the group members.

Figure 2.1

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[*] It must be remembered that this is merely a paradigm. Tiedeman believes that the paradigm has important correspondence with the available data of vocational development. Considerable study of this paradigm is still needed before it can be fully accepted, however.

The analysis of vocational development is oriented by each of several *decisions* with regard to school, work, and life which a person makes as he matures. With regard to *each* decision, the problem of deciding may be profitably divided into two *periods* or aspects, a period of anticipation and a period of implementation or adjustment.

I. The Period of Anticipation. Anticipatory behavior may itself profitably be analyzed into subaspects or *stages*. Relevant stages are those of exploration, crystallization, and choice. During exploration, activities are somewhat random and probably very acquisitive. As *patterns* begin to emerge in the form of alternatives and their consequences, we speak of crystallization. Finally, with clarification and commitment, choice occurs and the person begins to organize or to specify in preparation for the implementation of his choice. More specifically, each stage may be considered as follows:

Stage IA: Exploration: In exploration a number of different alternatives or possible goals (g_{1j}) are considered.* Relevant goals are those which can possibly be attained from the opportunities associated with the decision under consideration. The alternatives or goals *set* the field (f_{1j}) for choice; they specify the context in which choice emerges. The intended image is that of an open mind considering various purposes or goals. Conditions of relevance are given order and meaning only in relation to the goal. Hence the high saliency of the goal for understanding of the associated field. At this stage, fields are relatively transitory, highly imaginary (perhaps even fantastic), and not necessarily related one to the other. They are possibly a relatively unassociated set of possibilities and consequence. In exploration, a person probably reflects at least upon his aspiration, opportunity both now and in the future, interest, capability, distasteful requirements that still could be tolerated, and societal context for himself and his dependents. These are relevant aspects of the field set by each goal [i.e., g_{1j} (f_{1j})]. In short, a person attempts to take the measure of himself in relation to each alternative as he senses it. The structural components of this so-called "measure" and further specification.

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* Since we are attempting a fairly explicit notation, two subscripts are necessary to specify the designated goals. The first subscript (1 in this case) refers to all goals of relevance to the first decision problem. The second subscript, j, denotes the several (in fact j can take values 1 to n_1) possible goals or alternatives conceived in relation to the first problem of decision. A companion symbol will also be used to specify the variability possible with the field (f_{1j}) called to mind by each goal. At a later time we shall wish to note that a *specific* one of the n_1 goals g_{1j} is now relevant. We shall denote that condition by replacing j by a dot (.), i.e., $g_{1\cdot}$ ($f_{1\cdot}$).

Stage IB: Crystallization: The "measures" are probably accessible only in terms of organization or order, 0_1 [g_{1j} (f_{1j})], of all relevant considerations in relation to each of the goals (g_{1j}). This order is an aspect of crystallization. Crystallization is not irreversible, however. Sequences of tentative crystallizations, new explorations, and recrystallizations can be a part of this process.

Parenthetically, it is well to remember that each stage is intended to represent a discrete change in the condition of the decision. The quality of the decision is different at one stage than at an earlier one. In a sense, a metamorphosis takes place. The former elements are there but the new stage changes the character of considerations with regard to a previous stage. These conditions are represented by discrete stages and names in the paradigm. The metamorphosis is neither instantaneous nor irreversible, however. Hence, a representation of this process by double arrows. (⇄). Advance and retreat is possible at any stage and neither is necessarily limited to contiguous stages. Advance ordinarily eventually predominates, however. Therefore, the advancing is represented as the longer arrow.

Stage IC: Choice: As crystallizations stabilize, choice or decision becomes imminent. With choice, a particular goal, and its relevant field g_1. (f_1.) say, orients the behavioral system of the person of relevance for his vocational development. This goal may be elected with varying degrees of certainty and its motive power will vary as a result. Therefore, the "power" of this orientation is probably a function of the complexity and of the antagonism of alternatives involved in the ultimate crystallization. Furthermore, the degree of "rationality" generally available to the person in the matter of this decision will also affect the motivating power of the resulting resolution of alternatives. Some conditions of emotionality in relation with the decision will strengthen it; others will weaken the decision.

Stage ID: Clarification: Choice readies the individual to act upon his decision. In the relative tranquility prior to his initiation, however, the individual has opportunity further to clarify his anticipated position. An elaboration and perfection of the image of the future ensues.* Clarification probably not only perfects the image of self in position but also dissipates some of the former doubts concerning the decision. Otherwise it will result in a return to a more primitive stage of the process. Such clarifications probably create potentials for action in circumstances of high relevance for their realization. Consider, for instance, the college student who has crystallized his college major. His subsequent clarifications ordinarily create a potential directing his behavior for quite some time.

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* We denote this elaboration by similar but not identical symbols, *i.e.,* G_1. (F_1.).

II. The Period of Implementation and Adjustment. Imaginative concerns come face to face with reality on the day of initiation of implementation; a stage of *induction* begins. Superiors and colleagues associated with the position a person elects to fill start the process of perfecting their expectations for him. Eventually, however, a person ascertains that he is accepted; he "arrives," so to speak. A *transition* or metamorphosis occurs. The primary mode of reaction is no longer responsive; it becomes assertive. As the need for assertiveness subsides, however, a stage of maintenance ensues; status quo reigns as possible. Equilibrium is re-established. These three stages of this period of implementation may be further specified as follows:

Stage IIA: Induction: Eventually experience starts and induction occurs. The individual field organized by the person's goal comes into operating interaction with society's (*i.e.*, school or employer) related but not identical goal and field.[*] During induction, the person's primary orientation of relevance for his goal is receptive. This condition is represented in Figure 2.1 by noting that the individual's goal and field *assimilatively* become a part of the region (represented symbolically as $\in$)

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[*] Since this goal and field is usually related but not identical, we denote it by the Greek analogues of our Latinized notation, viz. η for G and ξ for F. Thus we write η_1. (ξ_1.) for this aspect of our conception.

of the position the person is electing to fill. This process leads to a further perfection of individual goal and field, $G_1.'(F_1.')$ say. A ready assimilation of individual goal and field into the group purpose of relevance for the position is probably a necessary aspect of "success."

Stage IIB: Reformation: With the gaining of confidence that one has been successful, a new phase starts: reformation. In reformation, the primary orientation of relevance for the goal becomes assertive. The group goal and field $[\eta_1.\ (\xi_{.1})]$ is attacked in order to make it a part (again represented by $\subset$) of the modified goal and field of the person. If the individual is successful the group goal and field is modified, i.e., becomes $\eta_1'.\ (\xi_1.)$.

Stage IIC: Integration: With modification of both the individual and group goals and fields, the integration phase is initiated. Both partners of the interaction strive to keep the resulting organization (represented as $0_1'\ [G_1.'\ (F_1'.);\ \eta_1'.\ (\xi_1'.)]$). The individual is satisfied, at least temporarily. The group considers him successful also. Of course, the person is likely to have an image of himself, as successful in these circumstances, too. Integration is not unalterable; it is merely a condition of dynamic equilibrium. A new member joining the social system, new strivings of existing members of that system, or a quickening of the strivings of the person himself may disturb the status quo at any time. Such disturbances, as elected by the person or as forced upon him, contribute either to his vocational development or disintegration.

Dependent Decisions and Vocational Development

The described process of deciding upon a course of action and of implementing that decision in a manner intended to perfect idiosyncratic interests in a collaborative relation of interests is *possible* in each decision of relevance for vocational development. The course of events of relevance to decision may be unfolding with regard to *several* decisions simultaneously, however. Man can reflect these particular matters into systems permitting organization of diverse sets. *It is these systems of secondary (or perhaps of more comprehensive) order that specify vocational development*. Therefore let us speculate about the structure within which those data may be comprehended.

Consider, for instance, an embryo physician as a freshman in college. He is probably still in a stage of induction with regard to his college choice, may be specifying his choice of a medical school while tentatively crystallizing with regard to an area of specialization in medicine, and also exploring with regard to a place to practice medicine.

Vocational development then is self-development viewed in relation with choice, entry, and progress in educational and vocational pursuits. It is a process occurring over *time* in man who is capable of anticipation, experience, evaluation, and memory. Man is aware of some of the relevant conditions but not of others although, in the latter case, his behavior may well be quite consistent with another person's suppositions concerning such conditions.

Hence, vocational development not only occurs within the context of a single decision; vocational development ordinarily occurs within the context of several decisions. Man both remembers and imagines. Therefore, crystallization in relation to selection of the first goal which led to organization O_1 can progress in some relation with tentative crystallizations concerning a second goal, g_{2j}, or even of a third, g_{3j}, or later goal. In fact, the discovery of dependencies among the several decisions hinges upon anticipatory behavior emerging in relation with several goals rather than with one alone. Similarly, traces of earlier considerations and evaluations of experience are ever present in any later mode of thought or of action. Hence, after-effects of all former stages with regard both to a particular decision and all earlier ones are ever present in a current stage with regard to a special decision.

The _anticipations_ at a given time with regard to one or more decisions _can_ influence a person's mode of action with regard to: (1) a particular decision now in question; (2) those earlier decisions whose drama is not yet completed; and (3) those later decisions that are as yet either being considered or are not yet fulfilled. Similarly, experience related to a present decision and prior ones influences development of later events. These contingencies of evaluation of experience and of imagining of the future are probably most relevant to the matters of _organizations_ of self as represented in the stages of crystallization and integration. The organization of self experienced in the maintenance stages of several decisions hopefully improve in quality and in the satisfaction they offer the person as his life progresses.

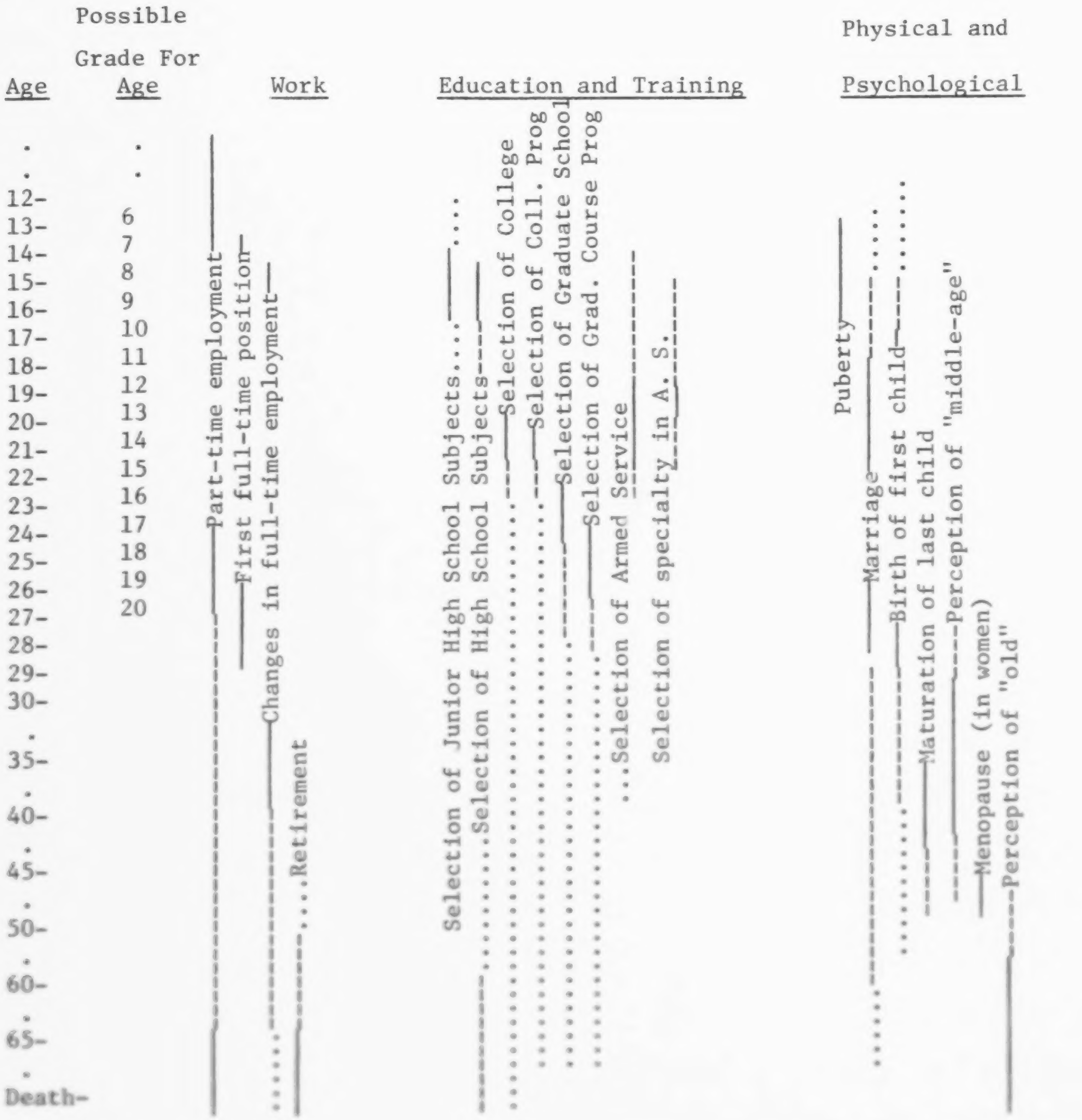
The aim of vocational counseling is to enhance the operation of reason in this dynamic process of vocational development and to free the person for progress in taking and acting upon a particular decision as well as in viewing decisions in relation with those taken and those possible. In this way, the counselor hopes to bring each client in his responsibility to view his educational and vocational decisions as a means-ends chain; that which is an end at an earlier time is to become a means for a later goal. Behavior is to become purposeful; evaluation is to become more meaningful; and an elaboration of self is to ensue. No goal is to become so compelling that it either destroys judgment in situations of conflicting goals or cannot give way to a later, and more fulfilling, goal.

The Pattern of Life and Vocational Decisions

The study of vocational development requires a specification of the context of decision in relation to the purposes a person hopes to realize in life through the vocational expression of himself. A slight approximation of the *nature* of these decisions is already possible from consideration of the structure of man, school, and work which limits man's vocational development. Such a specification is attempted in Figure 2.2 where definite physical and social limitations upon career development are represented in relation with the life span.

Figure 2.2

Patterns of Life and Vocational Decisions


Age
Possible Grade For Age
Work
Education and Training
Physical and Psychological
12-
13-
14-
15-
16-
17-
18-
19-
20-
21-
22-
23-
24-
25-
26-
27-
28-
29-
30-
35-
40-
45-
50-
60-
65-
Death-
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Part-time employment
First full-time position
Changes in full-time employment
Retirement
Selection of Junior High School Subjects
Selection of High School Subjects
Selection of College
Selection of Coll. Prog
Selection of Graduate School
Selection of Grad. Course Prog
Selection of Armed Service
Selection of specialty in A. S.
Puberty
Marriage
Birth of first child
Maturation of last child
Perception of "middle-age"
Menopause (in women)
Perception of "old"

Key:
Solid Line (——) indicates time when a decision must be considered.
Broken Line (---) indicates time when problem can and may exist.
Dotted Line (...) indicates a period when problem can exist but usually does not.

Figure 2.2 suggests the validity of the characterization of vocationaldevelopment which Super (1957) has derived. Considerable exploration takes place in adolescence. Taking up work immediately after leaving a school is a major problem in transition. Trial of work (i.e., the failure to pass beyond induction with regard to a series of job decisions) followed by establishment (reformation in Figure 2.1), integration, and decline (a phase not considered in Figure 2.1) seems a good characterization of the higher order effect of the inter-dependent career decisions. First there is mostly exploration, crystallization, choice, and clarification. Next there is mostly a series of inductions. Then there may be several reformations. Finally, integration may dominate. Of course, there is ultimately disengagement from work in what to Super (1957) is decline. If career has been truly consummated, however, this is an earned respite enjoyed in integrity. Man has surmounted his environment rather than the reverse.

Needed Research in Vocational Development

We are considering then a process of evolving and of acting upon a conception of self as it is expressed through vocational behavior. The evolution transpires through a series of decisions. Each decision potentially consists of seven distinct phases. Each decision is also to be considered in relation with a wider context of past and future decisions leading to the presentation of career before the world in pride and in confidence. Hence vestiges of previous organizations of self gradually dissolve into newer and more overarching organizations of self. The career evolves in a time pattern in intimate association with the evolution of other aspects of life. So how do we "research" this *second-order* process of decision which is vocational development?

First of all, we need to tune in more on people's *thoughts* about themselves in relation to study, work, and life. That is, we need to address informants to the structure of decision in which we are interested and to encourage them to talk to us about it. From these talks about self we must learn how field solidifies with goal. We must discover the content of field in relation to various goals. Next we must discover the *organization* of exploratory conceptions that precipitate crystallization and choice. Modes of reaction in induction, reformation, and integration are also matters we should collect, ponder upon, order, and learn to use in anticipating relevant matters of vocational development.

Second, as we study vocational development from an internal, genotypic frame of reference we must do so in a manner that permits verification of our speculations. Our efforts need not embrace empiricism so fiercely that the object of our regard, self, is utterly ignored, however. Rather we must learn to use that"self" in specified ways. Why don't we let the self establish its own classification of occupations for us, for instance? Our predictions of choice would probably be greatly improved by this simple substitution of frame of reference. The result could still be articulated with *our* opinion of the world and thus verified.

Finally, we must use a new criterion in the investigation of vocational development. For us, that criterion should be the work history. The three genotypic elements of a work history are: (1) the *kinds* of positions chosen; (2) their sequence; (3) the duration of stay in each. Much of our research on choice, personality, occupational classification, and some of our research on interests needs consideration in relation to the kind of position chosen. The residue of research on interests and all of our research on successful and satisfactory pursuit of educational and vocational endeavors relates to the matter of duration or implementation of choice. Finally, our emerging research on vocational development is of direct relevance to the matter of sequence of choice.

The work history then is the reality with which we must relate the considerations of career as career is understood through dependent decisions about school and work. This spreading of a life across the record of a work history is the vocational development about which we must always strive to formulate definite and verifiable propositions.

CHAPTER 3

THE SELF-CONCEPT: A CRITICAL ANALYSIS

Overview

In an extensive review of the research literature on "self-concept" Wylie concluded that "the theories are in many ways ambiguous, incomplete, and overlapping." (Wylie, 1961, p.3). Consistent with her view of the situation, Wylie organized her book "in terms of measurement and research design problems, and clusters of empirical studies, rather than around the framework of any one theory." (ibid.)

We strongly questioned whether the predicament that Wylie faced was aptly characterized by this apparently dichotomous pair of options. Therefore, Kehas presents here a critical analysis of the "self-concept" problem which, instead, focuses on a number of basic theoretical notions and from several related dimensions. In his analysis, Kehas confronts some basic psychological and philosophical assumptions, with the objective of clarifying some of the confusions in theory and, in addition, indicating directions for more effective conceptualization.

Reviewing the ideas of William James, Gordon Allport, and George Kelly, among others, Kehas emphasizes the notion of "self-concept" as "A way of talking about how man relates to his experience." This emphasis on the form or processes of organization, the means with which a person systematizes his experience in personally meaningful ways, leads Kehas to conclude with a statement which shifts the focus of conceptualization from "self-concept" to the processes of self-conceptualization. One specific implication of this shift in focus suggests that more attention be paid to behavior as a domain of inquiry within which we may delineate principles of organismic functioning, rather than behavior as a resultant or epiphenomena, the true determinants of which must be traced to forces operating outside that domain. A more general implication is that man as a subject for systematic inquiry may be viewed not merely in the mode of experiencing himself as an object but in the mode of experiencing his own life as a process of self-construal, self-confrontation and self-confirmation.

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*This chapter is based on a paper by Chris D. Kehas circulated under title of "A Critical Analysis of Attempts to Denote Self-Concept" (Harvard Studies in Career Development, No. 25).

Major Referents of Conceptualization

Inquiry into the literature of self theory reveals that the term, self-concept, may have at least three different referents in surprisingly similar discussions: 1) self; 2) concept of self; and 3) self-concept.

The differences among these referents are subtle and yet distinct. The first use - self - often appears in discussions attempting to argue for the necessity of some term in psychology to represent "the coherence, unity and purposiveness...of mental life" (Allport, 1960, p.71), a term which will avoid the objections which such use implies metaphysical or religious, i.e., unscientific conceptions. It attempts to give scientific respectability to a term previously dealt a supposedly death blow in psychology. In this first use, the referent is often synonymous with such concepts as "person" and "personality". This use is probably best seen in the writings of James (1890) and McDougall (1908) both of whom wrote before the aforementioned "death blow". McDougall's key construct was the "sentiment of self-regard". The earlier writings of Allport (1960) served to reintroduce the concept of self, i.e., ego, in psychology and to enhance its scientific acceptability.

The use - concept of self - is often equated with ideas or feelings about one's self, perceptions, attitudes, evaluations - in effect - generalizations about one's self. For example, Jahoda (1958) defines self-concept as attitudes toward the self. Porter (1950) speaks of self-evaluative attitudes as being the central determinants of behavior. O'Hara and Tiedeman (1959) define self-concept as an individual's evaluation of himself.

The third use - self concept - refers to "only those perceptions about self which seem most vital or important to the individual himself" (Combs and Snygg, 1959, p. 127). To the individual it represents his "generalized self". Theoretically it is not viewed as an entity per se, but represents the organization of the system of generalizations a person has about himself. Said in another way, the self-concept is the cluster of the most personal meanings a person attributes to his self. In many ways, the most advanced theoretical treatment of this use appears in the writings of Raimy (1943), Combs and Snygg (1959), Rogers (1959,1951) and the more recent writings of Allport (1955,1960,1961). Raimy views it as "organized appreciation of the self" (1943, p.21). It is not a or the self-concept; it is intended to represent what is seen as both an organization and a system of organizing principles.

This is not meant to imply that those who use the term self-concept in a particular way are not aware of or do not include the other senses or meanings noted above. In point of fact many do. The uses are not to be viewed as mutually exclusive. Although Allport is listed with the third use, his concept for these data is the proprium and his use of "central value orientations of a life" and "intentional characteristics" of a personality are further extensions of the proprium. These terms are equivalent, for instance, to the self-concept of Combs and Snygg. With others, the terms remain undifferentiated. Rogers' more recent formulations view the terms self, self-concept, and self-structure as being identical (Rogers, 1959). The point here is that oftentimes identical language is not intended to represent similar phenomena or to speak to similar considerations. Conversely, different language is used to represent the same phenomena.

The above should help to delineate and to clarify the ensuing discussion. As Munroe has said, "the self theories have left the concept (of self system) too far undifferentiated, with the result that it becomes a philosophical universal instead of a developmental construct" (Munroe, 1955, p. 367). Though Munroe is specifically referring to "self psychoanalysts" in this quote, the assertion is even more characteristic of self theories. This inquiry then will be concerned with those theorists who have made such attempts at further differentiation of self theories, i.e., with those dealing with the construct of self-concept - the third use above. Further, the inquiry will primarily involve those theorists whose efforts have had noticeable impact and effect within education and more specifically, within guidance.

Aspects of the Self-Concept

Self. The initial consideration will center about the referent of self in the term self-concept. Self-concept theorists are not consistent in their use of the term self. It will become evident that there is little consistency among these theorists in many of their terms though not necessarily in the phenomena the terms represent. Hall and Lindzey see the distinctions as dividing into two major frames:

> 1. Self-as-object -defined as a person's attitudes, feelings, and evaluations of himself as an object.
>
> 2. Self-as-process -defined as a group of psychological processes which govern behavior and adjustment; the self as a doer, in the sense that it consists of an active group of processes such as thinking, remembering, and perceiving. (Hall and Lindzey, 1957, p. 468)

Hall and Lindzey's distinctions fail to represent the situation adequately. Their self-as-process, as defined above, is more accurately self-as-subject, the "I" of experience. It is entirely possible, however, that the self-as-subject can "think", "remember", and "perceive" about, or on, the self-as-object, *i.e.*, that these are second-level processes, reflexive processes. Stated differently, subject and object are relational terms. Neither subject nor object has any meaning by itself, but rather takes meaning from being a subject or an object in relation to something, *i.e.*, from being in a contextual situation. Subject-object relationship implies that the relationship is the primary concept. A term that better represents the reality and the primacy of this relationship is self-as-process but not as defined above. It would have to subsume both aspects of the above definition. Self-as-process then has logical primacy from which second-order conceptions such as self-as-subject and self-as-object follow.* There is no duality on the first order; there are only the processes of dynamic realities. There are only persons. We experience ourselves as a unity and the"I" - self-as-subject - and the "me" - self-as-object - are discriminated aspects of this experienced unity. Self-as-subject and self-as-object are one transaction; no instance of one is observable without the other (Dewey and Bentley, 1949; James, 1890).

The distinction between self-as-object and self-as-subject is often made in the interests of furthering psychology as a science. Concern with the self-as-subject then becomes the province of philosophy or religion, i.e., a metaphysical problem or area for consideration. This, however, is done at the risk of denying the unity of the experiential process advanced in the preceding paragraph. The metaphysical problem is not easily resolved. The setting off of self-as-object as the concern of psychology may imply that the observer in the relationship is the same self which is being observed. This would be a return to introspection in the discredited, classical sense, for it is extremely difficult (if not impossible) to maintain that the observer and the observed are one and still have the inquiry reside in the realm of science.

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*Hall and Lindzey, finding that Combs and Snygg's self is both an object and a doer at the same time, found it necessary to communicate personally with the authors to validate their impression (Hall & Lindzey, 1957, p.470).

Putting self-as-subject back in for consideration need not, by itself, result in the inquiry becoming unscientific. Raimy, citing James, stated the point very succinctly:

> Closely allied to the metaphysical problem of the 'knower' is the problem of the 'real knower', or the 'real self'. The real self as the noumenon behind the phenomena is, however, a distinctly metaphysical problem and should not, since William James' classic chapter, 'Consciousness of Self', have been confused with the distinctly psychological fact that individuals do observe and do react to themselves. (italics mine) (Raimy, 1943, 9-10).

The position of those interested in self-concept need not result in discredited introspection. The observer can still be other than the observed. The psychologist (the observer) can deal with the "person observing himself" (the observed). Consideration of this fact - the person observing himself - as being a process involving the person as both subject and object merely serves to represent better the actuality.

The argument presented here is in agreement with James and Raimy as to the basic fact - "individuals do observe and do react to themselves" - but differs in that it views this fact as self-as-process, not simply self-as-object.

Concept. The second major consideration revolves about the use of and the meanings attached to concept in this context. It soon becomes clear that this term is used in a technical sense, that its meaning is inextricably imbedded within the theoretical frame of self psychology, and that this meaning is not consistent throughout psychology as a whole. This technical sense of concept might best be illuminated by first citing some of the ways in which it is used. A knowledge of this use is necessary to an understanding of self-concept.

William James advances the belief that the most fundamental postulate of psychology is that we have cogitations of some sort and discards all inquiries about the certainty of this postulate as being too metaphysical for psychology. He continues:

> We ought to have some general term by which to designate all states of consciousness merely as such, and apart from their particular quality or cognitive function....
>
> In this quandry we can make no definitive choice, but must, according to the convenience of the context, use sometimes one, sometimes another of the synonyms that have been mentioned. My own partiality is for either FEELING or thought. I shall probably often use both words in a wider sense than usual, and alternately startle two classes of readers by their unusual sound; but if the connection makes it clear that mental states at large, irrespective of their kind, are meant, this will do no harm, and may even do some good. (James, 1890, p. 185-6-7)

Thus James views thought and feeling as being inextricable, as aspects of a single process.

Raimy, in setting up his theory of the self-concept, declares his first principle to be that "the Self-Concept is a learned perceptual system which functions as an object in the perceptual field" (Raimy, 1943, p.336). He continues:

> Some explanation is needed for speaking of perceiving a concept. Our first reason is that percept and concept are but part of a single process. If we can speak of perceiving with regard to percept, we can also speak of perceiving in regard to

> concept.....Self-percept might carry the intended meaning but would not so easily connote the generalizing character of the system in question. Furthermore, the definition of concept implies nothing alien to the process of perceiving...(Ibid, 1943, p. 358)

Raimy views percept and concept as indistinguishable, as parts of a single process.

Combs and Snygg, acknowledging that their broad use of the word perception is somewhat of a departure from traditional practice in laboratory psychology, explain their view in this manner:

> Historically, psychologists have used the word perception to refer only to, 'a single, unified meaning obtained from sensory processes while a stimulus is present'. To describe acts of knowing, understanding, or forming ideas, they have used the words 'cognition' or 'conception'. In this book, however, the word 'perception' is used to refer to any differentiations the individual is capable of making in his perceptual field whether an objectively observable stimulus is present or not. There seems little need for more than one process to explain these events. Differentiations in the phenomenal field resulting in perceptions of seeing, hearing, smelling, or feeling are precisely the same as these made in conceiving, knowing or understanding. Although the subject matter varies, the process is the same. (1959, p. 30)

In their view, then, "perception" and "conception" are aspects of the same process which they choose to call perception.

A further word about the breadth and intensity of the word perception in the context of "perceptions of one's self". Fenkel-Brunswik hints at the "non-reductionistic" aspect of perception saying it is a fact that "there is some element of inference in every perception, and that conceptual constructs always relate to perceptual data" (1951, p. 357). Korzybski, takes a much stronger position declaring that "there is no 'perception' without interpolation and interpretation" (1951, p. 187). For Korzybski, perceiving seems to be equivalent to evaluating and to conceiving.

Kelly, in advancing his psychology of personal constructs, argues in this manner:

> While we have not said so before, it is probably apparent by now that we use the term construct in a manner which is somewhat parallel to the common usage of 'concept'. However, if one attempts to translate our construct into the more familiar term, 'concept', he may find some confusion. We have included, as indeed some recent users of the term 'concept' have done, the more concretistic concepts which nineteenth-century psychologists would have insisted upon calling 'percepts'. The notion of a 'percept' has always carried the idea of its being a personal act - in that sense our construct is in the tradition of 'percepts'. But we also see our construct as involving abstraction - in that sense our construct bears a resemblance to the traditional usage of 'concept'. And finally, we prefer the use of the term construct because, as a term, it has emerged more within the context of experimental psychology than within the context of mentalistic psychology or of formal logic. (1955, p. 69-70)

In attempting to clear up some of this "terminological promiscuity", Allport suggests borrowing the term proception from philosophy (in order to enable psychology) "to deal with the integrated disposition of a person to perceive, pay attention to, extract meaning from, feel, think about and respond to a situation, and to hold it in memory" (1960, p. 301). In other words, to represent the unified, molar quality of experiencing. He would like to maintain a distinction between perception and cognition and suggests proception as a term that would subsume them both.

The citations are lengthy but necessarily so in order to point out a tradition in which the terms concept, percept, feeling, and thought in some sense, are viewed as "one". In other "psychologies" the above terms are distinguished - in some psychologies very sharply, in others less precisely. This in part is what causes difficulties in communication between differing theoretical frameworks and contributes to misunderstandings.

A confusion similar to that involving "concept" also exists in the use of other combination terms such as self-image, self-observation and self-description. One way of lessening this confusion would be to search below the terms to explore the foundations upon which these terms are based. Stated differently, the concern is best viewed as being definitional and not terminological.

With this in mind, the appropriate question becomes: what is intended by "concept" in the term self-concept? Does this mean how an individual conceives of himself, observes himself? The image he has of himself? Is this merely descriptive? Does it include any and every bit of self-description or talk about self? It would seem that more than an observation or description is meant, that the term intends abstractions about one's self. The position advanced is that individuals differ, however, not in the sense that some abstract while others do not; the difference involves levels of abstraction, i.e.,some individual's abstractions can be relatively concretistic (Kelly, 1955).

What seems to be involved is knowledge of one's self but not knowledge in any restricted cognitive or intellectual sense. The concern is with how a person "thinks" about himself, but "thinks" in the James sense indicated above, not as opposed to "feels". The concern is with how a person gets to know himself; self-concept, self-percept, and other such terms intend to focus on the knowledge resulting from that process. This view that the basic process is that of getting to "know" one's self has never been explicitly stated.

In some sense then these combination terms represent different "forms" of knowledge. If we arrange these terms into some sequence that represents steps in the acquisition of knowledge, however, we would then be reverting to what Kelly has called atomistic thinking (see quote above).* We would be violating the unity of perceiving-conceiving which these theorists wish to maintain and to start from. The knowing is inherent in the experiencing or in Kelly's terms, knowing is construing. No separate term to represent the knowings or the knowledge is considered necessary by the theorists. Nonetheless, the notion - that self-concept is somehow concerned with knowledge of one's self - if pursued suggests that further development of theory would be enhanced by an exploration of theories of knowledge to see what they have to offer to the present considerations. A first look might well be at the transactional position advanced by Dewey and Bentley, a position of increasing importance in psychology (1949).

The above considerations would also speak to the charge that self-concept theorists have neglected the wealth of work done in concept formation, that, for instance, to explain the development of a person's self-concept, one must explain it as they would the development of any other concept. The equation of the two areas is misleading to some extent in light of the meaning attached to concept by self-concept theorists. The different original meanings result in different operational definitions.

The recognition of this special use of concept by self-concept theorists is deemed necessary to a fuller understanding of their position. Secondly, the behavior or experience that these theorists intend to represent is viewed here as the process of getting to know one's self.

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*Super (1963), in attempting to adapt self-concept theory to the development of theory in career development, has hypothesized a series of steps in the acquisition of self-concepts. His position thus differs from the "traditional" view in self theory.

Self Report. The question of the relationship between the terms self report and self-concept has been one of continuing and crucial concern. It has resulted in criticism of the very foundations of self-concept theories as seen by theorists of another bent; it has also resulted in some ambiguities and inconsistencies among the self-concept theorists themselves.

Some behaviorists and experimentalists in psychology have equated concern with the self report with unreliability, undependability, and subjectivity (as contrasted with objectivity) and concluded that it is unscientific, i.e., out of the realm of science. Stephenson, however, argues that Watson and Skinner among others have been misunderstood, that what they in effect said was that science was not able at that point to handle self reports as data. Stephenson sees their objections as resulting principally from an erroneous dichotomy between behavior and thought. Armed with Q-methodology - "a set of statistical, philosophy of science, and psychological principles" - he has asserted that psychology is now able to scientifically deal with self reports. He begins by viewing thinking as behavior and by not positing an "internal" as opposed to an "external" event in esse. In one sense, his starting point involves consideration of the self/other dimensions to a behavioral event. (1953)

Confusion of self report with self-concept has also resulted in ambiguities and inconsistencies with self-concept theory itself. Wylie, in organizing a critical survey of the research literature pertinent to the self-concept, concluded that to proceed from the standpoint of theory was impossible. She does not, however, distinguish between the two terms, self report and self-concept; in fact she very often equates a description of self given by a person with that person's self concept. In delimiting her review, she merely states that:

> From one viewpoint any investigation in which _S_ makes a report about himself, say on a personality inventory or in an interview, might be regarded as suitable for inclusion in this survey. However, we shall restrict ourselves mainly to studies which appear to have received at least some of their inspiration from self theories. (1961, p. 5)

"Inspiration from self theories" is neither a precise nor an adequate demarcation and in no way reflects an awareness of some important theoretical questions involving the relationship of self report with self-concept. Further, in discussing the construct validity of the instruments of the self theorists, she refers to "irrelevant response determiners".* These determiners are viewed as being outside the subject's phenomenal field and as interfering with the measurement of it by the observer. There seems to be implicit, in Wylie's thinking, an assumption that the subject's phenomenal field is _something other than_ the subject or the experimental situation. She considers the measurement of the self-concept to be an attempt to isolate a single, uncontaminated variable. She seems to be searching for a pure self-concept, one apart from situations. It suggests a concern with a real self. If this is so, it indicates an unfamiliarity with theory that may well have contributed to the difficulty she reports in organizing her book around theoretical concerns.

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*The irrelevant response determiners (in revealing phenomenal fields) which Wylie discusses are: social desirability, content areas, known identity of _S_, lack of rapport, instrument form, degree of restriction of S's response, set or expectation, response frequency, scoring or statistical procedures. (1961, p. 27-36)

Combs and Soper decry such confusion among workers in this area, declaring that:

> Confusion of the self-report with the self-concept in research has led to...confusion in thinking and research results, making communication extremely difficult. Confusion of the two terms represents a return to introspection, a technique of observation no more acceptable to phenomenological psychology than to more traditional approaches. (1957, p. 36)

They go on to define the self report *as a behavior* representing "what the individual says he is" and the self-concept as *a perception or inference made from behavior* representing "the organization of all that the individual refers to as 'I' or 'me'", concluding that "to treat the two as synonymous is to introduce into our research a large and unknown degree of error." (1957, p. 34-6) Thus unlike Stephenson, Combs and Soper (1957) and Combs and Snygg (1959) clearly distinguish between "perceiving or inferring" and "behavior", between an internal and an external event.

Combs *et al*. (1957, 1959) conclude that it is necessary to know the degree to which the self report is a reliable indicator of the self-concept. They propose that the degree depends on at least the following factors: clarity of the subject's awareness, lack of adequate symbols for expression, social expectancy, cooperation of the subject, and freedom from threat and personal adequacy. These considerations are somewhat analagous to what Wylie has termed irrelevant response determiners. The position of Combs *et al*. is that the observer has to *infer* the self-concept of an individual from that individual's behavior.

Despite a rather incisive discussion of some salient factors, Combs and Soper's considerations bring to light another confusion by distinguishing between the self-concept and the self ideal. They define self ideal as "the aggregate of these characteristics of self which the person feels are necessary to attain adequacy" (1957, p. 39). They see the self ideal as being prone to many of the same difficulties that self report entails, suggesting that by inquiring into a self ideal we may be introducing something which may not have a counterpart in the thinking of the individual.

Self ideal has been treated differently by the Rogers group. The operational translation by Butler and Haigh (1954) of Rogers' definition of the self-concept - "an organized, fluid but consistent, conceptual pattern of the characteristics of the 'I' or the 'me' which are admissable into awareness, together with the values attached to those concepts" (1951) - has the subject go through a Q-sort twice, first sorting his "self" and secondly his "ideal self". The latter sort - ideal self - is included to insure measurement of the "values attached to the concepts" portion of the original definition. The correlation between these two sorts is then viewed, however, as a measure of self-esteem rather than what it in effect is - an operational measure of the self-concept as defined by Rogers. Rogers' original definition, unlike Combs et al. would subsume the ideal self. This would suggest a very important difference between Rogers and Combs - two of the more prominent theorists - on the very basic level of the definition of the self-concept. To further compound the issue, Rogers, in his later formulations, gives separate definition to the ideal self as "the self-concept which the individual would most like to possess, upon which he places the highest value for himself. In all other respects it is defined in the same way as the self-concept" (1959). The situation leaves us in somewhat of a dilemma.

This lack of clarity in basic definitions is further compounded when one turns to a dictionary of psychology. English and English list the following definitions:

> self-concept: 1. a person's view of himself; the fullest description of himself of which a person is capable at any given time. -- Emphasis is upon the person as object of his own self-knowledge, but his feeling about what he conceives himself to be is usually included.....See self (Allport, 1960)... (English and English, 1958, p. 486)
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> self report: n. information furnished about oneself. The report may be simple statement of elementary personal facts (age, marital status, occupation, etc.), an elaborate personality rating, a questionary, an autobiography. (English and English, 1958, p. 488)

The dictionary definitions, for the most part, equate self-concept with self report. Self-concept is linked with the definition of self only in definition six of seven, which is equated with Raimy's definition.* The dictionary may well be merely a reflection of the existing confusion in this area.

Surely, a fuller consideration or maybe reconsideration of the term self report is necessary. What is the term intended to convey? At least two senses may be distinguished. The first may be expressed as "what the experience of the individual is or was during the event under consideration". This sense, suggestive of classical introspection and the work of Titchener, seems to posit an internal experience which the experiencer can best describe. The second sense, "a report made by the person about himself as distinguished from an outside observer making a report on that same event", seems much closer to the sense in which "modern" theorists are using the term.

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*Horace B. English, the senior editor of the dictionary, served as one of the advisers on Raimy's dissertation committee. Raimy cited his indebtedness to English for the elaboration of his theory of the self-concept. Carl Rogers was, interestingly, the chairman of this committee.

The first sense makes the experiencer both the observer and the observed; the second makes the experiencer only the observed. The second does not deny the reality of the first process, and moreover, wishes to make this reality the basic datum of concern. The progress of scientific considerations in this area tend to lie with the latter sense or definition. My concern is also with this latter sense.

Self. There seem to be two separate levels of consideration, those involving the "self" and those involving the "reporting". At least three different questions may be asked concerning the self. The first question concerns the "knowings" about or of self, i.e., that which is being reported. We may ask what is the nature of the "knowings" or of the self? Is there a real self to be known? Or are we talking about an experiential or phenomenal self? There is a basic issue here because many of the theorists, though openly relegating such concerns to philosophy or religion, still speak as though there is something in esse to be known. This relegating, however, still leaves the question open if we simply infer a self and worry not about whether it is real or not. The question is still unanswered and the burden of conceptualizing remains solely with the theorist. Small wonder that the self is confusedly considered the successor to a mind or a soul, the "ghosts" of psychology's past.

Raimy sought to avoid this controversy by limiting his study to what he termed the "revealed self-concept" as opposed to the "actual self-concept". In a very real sense, his data - self-references - are self reports and these he views as the revealed self-concept. He posits in the study that in a permissive situation - such as that provided by client-centered therapy - "the more complete the self-revelation, the more certain that the true Self-Concept is being revealed" (Raimy, 1943, p. 21). He openly leaves untouched the problem of the degree of correspondence between the revealed self-concept and the actual. His concerns about validity center about the extent to which his method (of categorizing and classifying self-references) adequately portrays the revealed self-concept (Raimy, 1943, 1948).

The second question, phrased as "can this self (which is being reported) be known", i.e., to what extent is it possible to know oneself? This question probes the area of the conscious-unconscious dimension, a dimension which will be spoken to more fully in another section below. Suffice it to say that the question can a person know all of his self even potentially is pivotal here. The answers given are necessarily bound with the position taken on the first question. To illustrate, (1) if a real self is posited, then the self that is known may be other than it. (2) If a real self that cannot be fully known is posited, then the self that is known may well be it but not necessarily so. (3) If a phenomenal self is posited - a self of experience - and experience is viewed as other than knowing, the question becomes how adequately can one know his experienced self, and essentially the same two questions asked about it. (4) If "experienced" is equated with "knowing" in some sense, then the self experienced is the self known.

The above questions do not entail an unconscious-conscious context but may well be asked within a context of levels of consciousness, the usual context of consideration in self-concept theories. No matter which of these selves (with the exception of (4)) one posits, a third question arises "How well do I know myself"? This question could become the question of accuracy, i.e., degree or extent of knowing, and could be crucial when one inquires into the development of the self-concept. Accuracy of knowing, then, can be questioned at a point in time or over time.

Report. Similar questions can be raised with respect to the second aspect of the term, the reporting. The first is "can I report all that I do know about myself", is it theoretically possible to do so? A second question, "will I report all that I know?", grounds the reporting within the situational context. A further question, "how well do I report that which I know?", involves the accuracy and the competency of the reporting.

At this point, both Wylie's irrelevant response determiners and Combs and Snygg's factors, mentioned above, take on meaning. Wylie seems to say that the self-concept obtained by researchers is contaminated by these irrelevancies, implying that what is obtained is a self-concept but not the desired "one". Combs and Soper seem to be saying that certain psychological factors will "always and irrevocably" - except possibly in some therapeutic situations - prevent a person from telling what he really believes about himself so that the best the psychologist can do is infer self-concept from what the person says he is. Their distinction between behavior and inferences about behavior raises a host of questions, e.g., metaphysical considerations of a knower other than the known and the wisdom of severely restricting the construct behavior. They do not speak [illegible] some very serious criticisms raised by Stephenson concerning their assertions.*

The theorist must answer for himself "is the report the reality?" But even if he says no, he cannot deny that there is some reality to the report. Clearly the more basic question is "is the report the reality that he is interested in?" Wylie and Combs, Soper, and Snygg say no. Stephenson says yes. Rogers also says yes but goes on to infer logically certain relationships among the self reports (as pointed out above) thus combining the two positions. In either case, however, the individual's self-concept is reconstructed by the psychologist. The psychologist can use either self reports or other reports. The dispute is not in what is done; the dispute lies in what is "used" in the doing. Stated differently, in either case the individual's self-concept is the basic concern. The theorists differ in how they wish to portray it.

Now if the report and the self are viewed as different it would still seem necessary to affirm that there is a "reporting self" which "resides" in the same phenomenal field as the self-concept and which is as much regulated by the self-concept. Pushed farther, some theorists would have to declare that the self-concept is "beyond" situations or contexts, a position they would want to qualify. Yet if the self-concept is situational and contextual, then the self report is in some sense the self-concept in a "special" situation, *i.e.*, one that the psychologist is observing.

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*Combs, Snygg, and Soper (1957, 1959) do state that Stephenson's Q-technique does not overcome inadequacies of basic conceptualization. The point made here is that the disagreement *is* over basic conceptualizations but their argument with Stephenson is centered on technique. Stephenson's basic conceptualizations and his criticisms appear in his 1953 book which is not referenced in Combs and Snygg's extensive bibliography (606 entries).

It is further evident that the considerations have revolved about the notion of self in the term self report. It is clear that few, if any, theorists have talked of the "self-concept report" signifying that what the subjects are reporting is their self-concept as opposed to their self (in accordance with the distinctions offered in a previous section). Combs and Snygg make no distinction between self and self-concept when discussing self report even after they have carefully distinguished between phenomenal self and self-concept. Stephenson would work with self-reflections and have the conceptualizing done by the theorist. Rogers, in his latest formulations, defines as equivalent self, self-concept, and self-structure.* Allport after reviewing a series of experiments to substantiate a belief that there are two forms of motivation, one ego-involved and one not, concludes that:

> The experiments also prove that the limen of ego involvement is lower than the limen for self-rocognition, an interesting finding, which warns us once more that conscious report and introspection will never be a sufficient method for exploring the operations of the ego-system. (1960, p. 86)

There is then abundant evidence of some basic contradictions involving the relationship among the terms self, self-concept, and self report. Further systematic examination is requisite if these contradictions are to be dispelled and if the theory is to develop in a meaningful fashion.

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*In discussing general problems in personality measurement, Cronbach (1960) suggests that self-report be interpreted as the subject's "public self-concept," as opposed to his private self-concept, thus resolving the more theoretical "truth and distortion" questions raised in this section. This, of course, is somewhat analagous to Raimy's distinction between the revealed self-concept and the actual. Super (1963) has decided to focus on the "reported self-concept", restricting his concern to the conscious processes of the subject.

Organization

A few sentences back, we spoke of the situational or contextual aspect of the self-concept. One might surmise from this that for every situation, there is a self-concept, and that the scientific pursuit of such an atomistic self-concept, would therefore be fruitless. This impression is not what was intended, though situationism is certainly a problem. Positing a concept of self unique to every situation posits (in one sense) no constancy of person over and across situations. In contrast, what self-concept theorists wish to do is to study the experience of constancy, of "cohesiveness, unity and purpose" that seems to be characteristic of human experiencing, *i.e.*, the relatedness of these concepts of self. In one sense, *self-concept* is a way of talking about how man relates to his experience. This cohesiveness, this relating implies a gestalt, a patterned interrelationship of these self experiences. These considerations lead to the question of organization, *i.e.*, how does an individual systematize his experience. It is the individual structural pattern that is of concern. The theorist centers on how the individual organizes his behavior.

There seems to be a factor of centrality of importance to the ways an individual "conceives of" himself. *Self-concept* does not include any and all the ways an individual has of seeing himself, of evaluating himself. It does not include any and all feelings about or attitudes toward self. It is not to be equated with self-experience. It is not viewed as the sum of nor the equivalent of the myriad concepts of self which an individual possesses. There is a periphery-core aspect to the organization of self. Some conceptions are viewed by the person as involving more of "self", i.e., self-experience is hierarchially organized in terms of personal relevance. For example, Combs and Snygg make this distinction with their terms, phenomenal self and self-concept, the latter being defined as "only those perceptions about self which seem most vital or important to the individual himself" (1959, p. 127). Indeed the core is the self-concept for Combs and Snygg. Allport (suggesting that self and ego are terms which have lost their usefulness) here distinguishes among "non-ego - and ego-involvment" and within the latter the "proprium" which has "intentional characteristics".* Rogers distinguishes between the self (incorporated experience) and the organism (unincorporated experience). Kelly(1955) distinguishes between core and peripheral constructs. Sullivan speaks of a self dynamism and subdynamisms within the self-system. Jahoda's (1958) treatment, however, seems to miss this distinction.

The question of organization for some shifts to concerns about vacillations within a person. It leads to questions such as these: Does the concept of organization preclude, limit or otherwise impede the consideration of changes within one's self, even the momentary changes? Is the concept of organization a limiting one in consideration of the realities of one's experience? The answer to both these questions is that it need not be. Implicit in the question is a sense of organization as being something fixed and complete. Organization or structure loses its fixity when viewed as simply the ordering of relationships among a complex of intertwined and interdependent factors (Korzybski, 1951). The self-concept is a systematizing of one's self, the effect of which is to allow the individual "to symbolize and reduce his own vast complexity to workable and usable terms" (Combs and Snygg, 1959, p. 127). Further it need not be a question of _either_ organization _or_ disorganization, but rather _degrees_ of both organization _and_ disorganization and degrees of stability and degrees of flexibility of organization.

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*Combs and Snygg's theory is declared to be completely phenomenologically based. The phenomenal self and the self-concept are differentiations within the phenomenal field which includes and "regulates" the phenomenal nonself. Allport, on the other hand, seems to see no relationship between "ego-involved" and the "non ego-involved"; he talks of a discontinuity between them, of the separateness of the two systems.

Consistency: The question of organization is enmeshed with the question of consistency. As considerations of consistency become complex, the problem again becomes multidimensional. Are we concerned about:

consistency among different concepts of self?
consistency within a concept of self?
consistency at a point in time?
consistency over time?*

Shlien, in some unpublished notes, sees the theoretical demand for self consistency as being antithetical to the idea of shifting frames of self reference as the "natural" state of things. He would rather view consistency as meaning "not being cut off from the past...yet...not being bound by it" (Shlien, undated, p. vi). He concludes that self consistency is a barrier to self-concept variability and suggests that _continuity_ is a better concept. He also raises the questions of whether "my consistency is necessary for me or for you", _i.e._, whether consistency is something an individual needs or whether it is somthing imposed on an individual in order that he become more predictable to others.

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*The same series of questions could be asked with respect to organization.

In a somewhat similar vein, Kelly furthers the considerations, preferring to maintain the term consistency. Reading into Lecky (1945) somewhat, Kelly suggests that the proper stance for viewing the question of consistency is that it is a "property attributed to experience by the person who has the experience." (1955, p. 87). Further he argues that what is viewed as inconsistent by an outside observer may better be viewed as part of the individual's *system*, *i.e.*, the observed inconsistency may well be subsumed by a larger consideration to which or with which it is consistent (from the position of the person having the experience). He allows very explicitly for inconsistency among subsystems but proposes that at some level a person has a set of major personal constructs that systematize his experience.

It is clear at one level that Shlien and Kelly are attempting to explain the same experience -- how the person "can be organized and still appear to behave in a disorganized fashion" (Kelly, 1955, p. 88). It is equally clear that their semantics would be confusing to an outsider.

The above considerations speak to the "form" or the process of organization; the "content" or parts is a separate question. Wrenn (1958) and Strong and Feder (1961), prefacing reviews of the literature dealing with self-concept, have as starting points for theory the notions that an individual has (1) many self-concepts and (2) a fairly consistent hierarchy of selves. The switch from self-concepts to selves is made unhesitatingly in the same sentence, thus having the effect of equating the two. Wrenn goes on to list some of these selves, e.g., the perceived self, the self that he thinks others believe him to be, the ideal self that he would like to be, the preception of the others, the Inferred [sic] self. His list implies that each description or report about himself elicited from an individual (in response to a given set of directions from an investigator) is a self-concept.

Similarly Shlien, operating out of client-centered therapy, seems to view the shifting frames of self references as "selves", as evidenced by his comment "to be your self you must be able to be the many selves you are from time to time" (undated, p. vi). In another context, however, Shlien equates self with self-concept and names a few relevant dimensions, e.g., loveable-hateful, worthy-contemptible, lucky-unlucky (undated). It is unlikely that he would be willing to call these dimensions different selves -- a loveable self, a worthy self, a lucky self. They are better viewed as conceptions of self rather than selves, but equating the two lends confusion. Suggesting that the main way of organizing is along the dimension of a hierarchy of selves tends to blur such considerations of periphery-core distinctions, and the relationship of self-report to self-concept. A hierarchy of selves further suggests that the theorist is defining the individual's way of organizing experience rather than eliciting it.

This hierarchy of selves is different from viewing the self-concept as an organization of personal meanings (or perceptions, conceptions, reflections, observations, etc.) which cut across particular persons and experiences. This second view would be closer to the second sense of Shlien, i.e., the dimensions of self structure. Though variability of self reference is a fact. there is no good reason to posit an infinite or even an unwieldy number of crucial dimensions of organizing self. Behaving effectively may well require that individuals do highly generalize, highly systematize their own experience. Goldstein's work moves towards this definition of "healthy" man as an abstracting, forming, conceptualizing being (1939).

The more recent searchings of Raimy for a way of investigating the structure of the self-concept are another example of this second view--an organization of meanings. Finding such terms as attitudes toward the self and self-percepts ambiguous, Raimy prefers "to corrupt a bit of Latin"--radix--to make it mean "a conviction which a person has about himself which is clear-cut and definite for the person" (1961, p. 2). He views radixes as (1) sources of behavior which is consonant with these convictions and (2) as being interrelated, having both subordinate and superordinate relationships. Examples of radixes are "I am ashamed of my physical defect," "I am not attractive to girls," "I am afraid of people." He suggests that "the mapping of the relationships among the radixes of a given person might be a means of mapping certain aspects of the self-concept, or eventually, the entire self-concept itself" (1961, p. 3).

The first view--an organization of selves--is reminiscent of James' selves and his statement that "the self is the sum of the different roles the person plays." Such a definition, as May points out, was a gain in its day but leaves unanswered the question of the integration of these selves. May, Angel, and Ellenberger propose that the self is better defined as "your capacity to know that you are the one playing these roles" (1958, p. 64). It is difficult to distinguish this line of inquiry from the conception of roles in a sociological sense, i.e., what is posited is that a person has a meaning system relevant to a role which is different from a meaning system over and across roles. The second view--an organization of meanings--lodges the organizing with the individual; the task of the theorist is to elicit that individual's "organizing structure." The constructs of the first view appear to be logically derived whereas the constructs of the second are empirically or experientially derived. Said differently, the theorist, in the first sense, would be defining the individual's way of organizing experience rather than, as in the second sense, eliciting it.

Within both schemes, self-concept is a way of talking about man organizing his behavior, (1) i.e., how the behavior is construed by the individual in his system and (2) a way which will help the theorist to predict future behavior and to explain present or past behavior. With the first, the dimensions of organizing or construing are supplied by the theorist; with the second, they are elicited.

Taking Stock

Throughout the preceding, we have attempted during the discussion of an aspect to include some of the implications and conclusions involving that particular aspect. At this time, a consideration of several important dimensions will be either extended or introduced in an attempt to draw the study together and to add to the cohesiveness of the inquiry.

Movement in Theory. Though the theorists agree on the need for such constructs as those discussed above there is very little agreement with respect to a common terminology. The differences, however, may be indicative. Some of the confusion surrounding the referents of conceptualization of the term self-concept may be lessened if we view self-concept theories as being a logical extension or development of self theories. In a very real sense, self-concept theories do represent a refinement and elaboration of the position of self theories. This movement may well go unnoticed, however, if theorists persist in equating the various terms used, as Rogers does with *self*, *self-concept*, and *self-structure*. This equating has the effect of minimizing the differences amongst theorists and their terms and may blur some meaningful distinctions.

What is the nature of this movement? The effect of shifting the emphasis from self to self-concept may be a more explicit declaration that theorists are not concerned with a *real* self. They do not posit a self within a person. The further differentiation from self to self-concept has the effect of taking the argument from whether or not a person has a self, *i.e.*, an entity that exists by itself. Such a position very appropriately raises a host of metaphysical questions. The "new" theoretical arguments rest on the postulate that a person "has" constructs about himself, *i.e.*, he construes his experience, in much the same sense that a psychologist or any scientist has constructs about his data. The basic datum assumed by the self-concept theorist is that the individual organizes his experience, and further, that these organizing principles influence his future behavior. A person theorizes about himself as a psychologist theorizes about his data; in both cases, the theorizing not only interprets past and present behavior *but also* shapes future behavior. The differences are to be found in the level of sophistication and refinement not in basic processes. Both instances are viewed here as behaviors that can be incorporated within a general theory of behavior. In another sense, this position proposes that there has been an explicit redirection of efforts in self psychology from a concern with psychological entities within man, e.g., selves, to a concern with persons psychologically. The psychologist now explicitly postulates that the "person" has a concept of himself, not a self.

The Process Dimension. A second consideration has been hinted at and suggested by the preceding discussion but will be treated separately in order to emphasize its importance. This consideration centers around process considerations as contrasted with entity considerations and relates directly to the discussion on self-as-object and self-as-process (see above).

Self-as-object has the effect of suggesting concern with an object, entity, category, state and/or trait of a person. It is closely tied with a Newtonian conception of science, one concerned with discovering what really is. Self-as-process considerations shift the focus from self-concept to the process of self-conceptualizing; its metaphysics are more in keeping with modern conceptions of science (Bridgman, 1949, 1959). It shifts the concern from the objectifications to the process of objectifying--a fundamental difference. Self-as-process has the effect of lodging self-concept in the very processes of behavior, rather than viewing it as a result of behavior or something other than behavior. It is the process of "getting to know oneself" and the systematizing of these knowings (which is itself a knowing).

The difference may be illustrated with a consideration of the question "Does everyone have a self-concept?" Such a question asks whether all individuals have developed a sophisticated sense of self that can be called a concept (concept here representing an "advanced" category of knowledge unlike the view examined above). It may also question whether everyone looks at themselves in the way in which self theorists do or if an intelligence component is related to concept formation. If we are looking for a high level of abstraction or concept formation representing a higher order of knowings, then it may well not be there. Against this assumptive structure, the man who answers "I work and I eat" will be judged not to have "a" self-concept or at least will be considered suspect. If, however, the process of self-conceptualizing is viewed as the behaving process, which in turn is viewed as the process of defining (giving definition to) self-in-experience, the original question changes. In order to have any meaning in this new frame, it changes from "Does everybody have a self-concept?" to "Does everybody engage in the process of self-conceptualizing?" And the answer is an obvious yes because the process is equated--and seen as being identical with--the behaving process. Thus the answer with reference to the man who says "I work; I eat" is that his _is_ a way of conceptualizing self, but that (to paraphrase Kelly) this person is so limited in his abstracting that his conceptualizing is, in effect, relatively concretistic (1955, p.50). Again here, the difference is a matter of levels, not basic processes.

Hence, assessment of the self-concept, now viewed as process, is concerned with seeing what it is like rather than looking to see if it is there. In the latter view, the knowing about one's self is other than the behaving; in the former, the knowing is grounded in the behaving. From the standpoint of the individual, behaving and "getting to know one's self" are the same.

The Specificity of the Notion Self-concept. When a term such as self-concept can be made to mean so many different things by so many different theorists, there is a danger that it may, in effect, become meaningless. We prefer to reserve the term self-concept for the third meaning above, _i.e.,_ the cluster of the most personal meanings a person attributes to himself. Otherwise confusion will grow and the term will lose its force. If such is not possible -- and in company with Allport, we doubt that it is possible at this stage -- then a term less prone to other uses and to misunderstandings should be used.

In answer to this need, Allport has offered _proprium_. In one sense, it is a synonym for self and ego which are identical in Allport's vocabulary. Proprium is used to distinguish "what an individual feels are vital and central in becoming" from "what belongs to the periphery of his being" (1955, p. 39). Proprium is not co-extensive with personality; in fact it is at the lower end of a continuum -- self, consciousness, personality, organism -- ranged in terms of comprehensiveness or inclusiveness, _i.e.,_ organism is the broadest term. But in addition to proprium as a key construct, Allport also offers such terms as propriate strivings, intentional characteristics, cardinal characteristics, and value schemata without clearly distinguishing among these terms. Proprium appears to be a composite of the various references of other authors to the self-concept.*

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*Allport discusses the following as principal functions and properties of the proprium: bodily sense (coenesthesis), self-identity, ego-enhancement, ego-extension, rational agent, self-image, propriate striving, and the knower.

There is no clear discussion of the relationship of the eight proprium functions except that they are inextricably interlocked. Indeed the proprium seems to be a repository of functions; borrowing Luchins' words, the "whole" appears to be a "hole" (1960).

Kelly has offered the terms _personal construct_ and _personal construct system_. He has dimensioned the constructs along coordinate axes distinguishing between core and peripheral, superordinate and subordinate, tight and loose, and comprehensive and incidental constructs. He intends that the "constructs be used _propositionally_ rather than _preemptively_" (1955, p. 531). His distinction does not go beyond the dimension of core-periphery to a specific denotation of these core constructs.

The direction of the task is clear. Attempts must be made to differentiate further the process of self-conceptualizing, to break down the systematizing into subsystems. A first step is, as suggested, to distinguish amongst the "major" system and the "auxiliary" systems.

This author suggests and is working toward the use of _personal definition_ as a construct. It differs from Kelly's personal construct in the Kelly chooses to view the basic process as one of _construing_. Many people, however, do view the basic process as one of defining experience, _i.e._, giving meaning to self-in-experience, which is the process of "getting to know one's self". Statements such as "I'm that kind of guy" and "I'm just built that way" illustrate this view. In one sense Kelly's psychotherapy is directed towards a re-viewing of what has been experienced by the person as a definition or a "_fact_" to viewing it as a construction. The effect of Kelly's thinking is to loosen the force of the "meaning given to self-in-experience" so that change in his clients becomes more possible.

Personal definition is closer to Raimy's radix which is viewed as having the strength of a conviction about one's self. Kelly's core construct does not convey the strength of definition or of conviction, rather it implies placement or position or relationship. The use of personal definition should not be construed as an emphasis on intellectual or rational concerns; in addition to the relationship aspect, it is intended to convey the force of the knowing as experienced by the person.*

A second step might be an analysis of the implications of personal definitions with respect to a language of self (used by individuals, not theorists) as suggested by Scheffler (1954, 1960). His proposals for examining the language of education have direct relevance in exploring the language people use to talk about themselves. We could inquire into the logical force of the personal definitions in order to establish more adequately the consequences for behavior of these definitions, the "behavioral force" of these definitions.

The task need not be viewed as endless. Indeed, there is some agreement that the number of personal definitions may be few. Allport says "...our essential hypothesis remains unchanged: the forces of organization are so strong that in any given case a few leading characteristics do in fact depict the course of growth" (1955, p. 92). An important corollary in Kelly's theory is that "a person's construction system is composed of a finite number of (dichotomous) constructs" (1955).

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*Implicit here is the view that definition is viewed as the structuring of self and is concerned with relationships. The view expressed by Korzybski: "The structure of anything...must be in terms of relations. To have'structure' we must have a complex or network of ordered and interrelated parts. The only possible link between the nonverbal and verbal levels is found in terms of relations; and therefore relations as factors of structure give the sole content of all human knowledge." (1951, p. 178)

Raimy reports that his investigations have raised for him the following question: "Do people normally think about themselves in terms of simple cause and effect, rather than in terms of multiple determination of behavior which we psychologists accept as a matter of principle?" (1961, p. 4). In positing the latter -- multiple determination as being the experience of the individual -- the psychologist may be imposing his theoretical preconceptions on the individual. In like manner, the psychologist, in positing an infinite number of conceptions of self, may be imposing his theoretical preconceptions on the individual. These positions may lead him away from the way in which a person experiences himself and could also tend to view the individual as being a scientist at the moment. Though the development of man may be in the direction of "man, the scientist" as Kelly proposes and though science is merely a way of "getting to know," it would be unreal to consider all men now as being scientists in the ways in which they get to know themselves. Even scientists (by occupation) are not by definition scientific in their experiencing of themselves. The point is that complexity in theory may be resulting in theorists unnecessarily presuming complexity in "behavior as experienced by the individual." It is a matter that requires further research.

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Summary

This has been an inquiry into theoretical attempts in psychology to denote self-concept. It was discovered that the term had at least three distinct, identifiable referents of conceptualization -- self, concept of self, and self concept. Attention was then centered on self-concept theories with special reference to those theorists who have had significant impact in education, and more particularly, in guidance.

The analysis focused on certain aspects of major concern with self-concept theory and involved a consideration of "self," "concept," self report and organization.

Concluding remarks offered the following implications:

1. that changes in emphasis from self to self-concept may be evidence of movement in theory.
2. that a shift in focus from concern with self-concept to the process of self-conceptualizing seems necessary.
3. that the evaluative dimension implicit in the work of some theorists hinders the development of theory.
4. that attempts must be continued to further differentiate the process of self-conceptualizing. Personal definition was offered as a construct with the intention of conveying both the centrality aspect and the behavioral force of the "conceptualizing about self."

CHAPTER 4

SELF AS PROCESS*

Overview

In this chapter Field extends the implications of the position which Kehas (1962) outlined in Chapter 3. In addition, he provides explicit strategies for operationalizing those conceptual implications within particular situations of vocational behavior. Furthermore, he relates his suggestions to two major alternative strategies by providing an extended critique of then unpublished work of both Tiedeman and Super.

In commenting on his essay, Field indicates that it represents an attempt to describe and emphasize the dynamic and partially irrational character of individual development-in-vocation. He attributes this emphasis to an increasing discontent with the static theoretical referents which, in his view, remain paramount in the research of many investigators. He begins his discussion by commenting on the implications of the language in which much of this current theory is framed. Then he attempts to substitute more dynamic referents. Finally, the implications of these new "referents" for a vocational theory are placed within the context of a revised structural representation of individual development-in-vocational situations.

Three central purposes inform Field's discussion: First the effort to provide explicit representation of the dynamic processes of individual development. Second, the major purpose, to provide a more adequate theoretical basis for a more comprehensive exploration of behavioral determinants. Third, to define an explicit context for further investigation, one which shall provide the operational delimitation sufficiently narrow to permit a more comprehensive consideration of the subject matter.

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* This chapter is based on a paper by Frank L. Field circulated under title of "Self as Process: A Revision of Vocational Theory Directed Toward the Study of Individual Development in the Vocational Situation" (The Harvard Studies in Career Development, No. 26).

In brief, Field's central emphasis is upon those aspects of the transaction between situation and person which affect choice by determining the bases for choosing. It is this emphasis which sounds the note anticipated in the statement of Gombrich's which stands as an epigraph to this book. It is, furthermore, the emphasis which leads to an increased regard for the multiplicity of factors which find integrated expression in a person's "style" of experiencing. It is the emphasis which leads readily into the issues which comprise the bases of the period of "reassessment" to follow.

Critique of Super and Jordaan (1963) and Tiedeman and O'Hara (1963)

A comprehensive criticism of content in vocational theory is beyond the scope of this chapter.* Fortunately, it is not necessary in order to establish the departure implicit within subsequent chapters. As an introduction to the position to be developed I shall: (1) point out some basic omissions in two major theoretical statements, and (2) offer analyses regarding the use of terms and concepts basic to vocational research.

This is an ideal time to make such an analysis because two central researchers have just completed comprehensive statements of their thinking for publication by the College Entrance Examination Board (Super and Jordaan at Teacher's College, Columbia University; and Tiedeman and O'Hara at the Graduate School of Education, Harvard University). Those excerpts chosen for critical analysis have come from these essays. Super's position will be considered first.

Career Development: Self Concept Theory (Donald Super)

Donald Super has been at least as instrumental as any investigator or theorist in shaping the image most commonly conjured up by the term 'vocational development.' Especially during the period following

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* There are several summaries of current research in vocational development: Super and Bachrach (1957), Tiedeman and O'Hara (1963), and Borow (1964) list and describe many relevant studies, at the same time setting them in the context of a developing science.

1950 when vocational psychology started to expand beyond the simple trait-factor approach, Super was often the first and frequently the most effective integrator of new or "non-vocational" concepts into vocational research. Thus, (1) he stated the importance of self-concept to individual development (Super, 1951); (2) he pointed out the heuristic qualities of such concepts as 'vocational development' and 'career' (as opposed to 'occupation' or 'vocation') (Super, 1953); (3) he offered an expanded categorization of individual characteristics relevant to vocational development (Super, 1953; Super _et al_., 1957), and (4) he developed a useful categorization of occupations (Super, 1957). His two basic texts (1949, 1957) are still mainstays in those basic education courses concerned with measurement and guidance.

The following analysis involves three of the five essays which make up the contribution by Super and his associates to _Career Development: Self Concept Theory_ (Super, _et al_., 1963).

The first essay of this collection, Super purports to place self-concept theory in the conceptual structure representing vocational development. It first reviews the research in this area, although there are some important omissions (O'Hara, 1957, 1959, and 1961; and Tyler, 1961). Research conclusions are summarized and then codified into a brief outline proposing elements of a self-concept theory of vocational development.

The second essay represents an attempt to establish the nature of the self-concept in order that the term may become useful operationally. Definition is attempted and the use of several assessment instruments is proposed upon the basis of his suggested definitions.

The third essay (by Starishensky and Matlin) and the fourth essay (by Jordaan) develop some of the above thinking in still more operational terms, but because they are derived from Super's basic orientation they will not be discussed here. In brief, they are subject to many of the same criticisms as Super's statements; to a large degree they represent structural or operational derivations and elaborations.

The fifth essay contains a discussion of the stages of vocational development through which an individual must pass and defines the developmental tasks involved at each stage. This is to provide criteria by which an individual (1) can be identified according to the stage in which he is involved, (2) can be compared with others in that stage, and (3) can be evaluated in terms of a normatively defined "vocational maturity." Finally, vocational maturity is offered as a measure of the reflected changes noted through individual assessment at two or more developmental stages.

As implied earlier in this review, Super's essays display no substantial conceptual movement beyond his original contributions. Those emerging constructs ('career development' and self-concept) which he brought into vocational theory have not been permitted to develop or even to retain their dynamic and phenomenological referents in his theoretical structure. The highly empirical orientation to theory-construction characteristic of the Career Pattern Study has served to transform these process-activity terms into primarily state-property labels. As a result these labeled conceptual aspects of the unitary developmental process have "frozen," acquiring a separate reality from the data accumulated by assessing them out of total context.

Use of the term 'self-concept' in the aforementioned essays provides an especially clear illustration of this transformation by which a behavioral process "becomes" a rigid, unchanging state or property. Following his review of the research literature, Super offers the elements of a self-concept theory of vocational development. It is described in terms of self-concept development as outlined below:

I. Self-Concept Formation, involving:

Exploration

Self-differentiation

Identification

Role Playing

Reality-Testing

II. Translation of the Self-Concept into Occupational Terms:

This phase is dealt with largely by Starishensky's and Matlin's theoretical model. In brief, the self-concept held by the individual is "translated" into occupational terms through the act of choosing a job. Thus, "I am" statements are related to "(Physicians) do" statements; choice implies a translation into "I am like Physicians and will do as they do."

III. Implementation of the Self-concept:

> The implementation or actualizing of the self-concept is the end result of these processes, as professional training is entered or as education is completed and the young man or woman moves from school or college into the world of work. In an early phase, the premedical student enters medical school, proud of his developing sense of professional identity. In a later phase, the young engineering graduate gets

> his first job as an engineer, and rejoices in his new title, symbol of *his having converted his self-concept into a reality*; the young executive trainee who finishes his rotations through the planned sequence of training positions and settles at his own desk, with his own nameplate in front of him feels he has *finally arrived*. (Super, *et al*., 1963, pp. 13-14; italics mine)

Does the self-concept cease to develop following entry into "real" work? Is such entry the high point of development? In all fairness it must be emphasized that Super has answered "no" to these questions. Nevertheless, his writing and research have not reflected this answer; he continues to denote and assess *the* self-concept as one measure of vocational maturity. The more recent *process* referents of self and development, explored by Kehas (Chapter 3) are not denoted by Super's use of the terms, consequently the power of such terms to represent behavior is not transferred to Super's theoretical structure. However, it must be emphasized that Kehas' study found these more recent concepts to be poorly stated in many cases, and difficult to utilize in their present form.

The approach to behavior through states-properties rather than through process-activity has apparently contributed to the second major shortcoming of Super's theoretical orientation. Thus *types* of behavior are described, implying that behavior is a separable process. The following statement by Super reflects several such conceptual separations, as well as the terminological problems which have resulted from them:

> *Implementation of a vocational preference* is a developmental task of late adolescence and early adulthood, of the years from 18 to 25, of the Transition and early Trial substages. As the boy or girl, young man or woman (who may still

> be called either boy or man, girl or woman) makes the transition from general education or training, from school or college to employment, he is expected to convert his specified vocational preference into a reality, to implement his choice. The concept of implementation is so important that it has been suggested elsewhere (Super, 1957, p. 184) that the term *preference* be used when relevant *behavior is verbal*, an attitude of liking or adience, and that the term *choice* be reserved for *motor or instrumental behavior*, to denote implementation, a preference which has been acted upon and at least partially made a reality by involvement with environment. Implementing a preference (choice behavior) is exemplified by applying for admission to engineering school, beginning the premedical course, or taking a job as a mechanic's helper. Implementation at a low level can take place without having been preceded by specification, just as specification can take place without crystallization: motor behavior is central to the concept, not verbalization. Verbalized or conscious behavior, it is true, is likely to be superior to unverbalized or unconscious behavior, because it may be characterized by the crystallization and specification of goals and the analysis of means of implementation: as Baldwin's (1955:114) model of mature behavior puts it, it is likely to be characterized by *cognition, goal selection, and goal directedness*. (Super, *et al*., 1963, pp. 82-83; italics mine)

The term 'preference' is used to denote 'verbal behavior' and is also equivalent to 'an attitude of liking or adience.' This immediately implies two states: one, *feeling* attracted and, two, *expressing the feeling* of attraction. A subsequent statement adds an "optional" third stage to 'verbal behavior': "Verbalized or conscious behavior . . . is likely to be superior to unverbalized behavior, because it may be characterized by the crystallization of goals and the analysis of means of implementation. . . ." Thus, expressing a feeling of attraction also implies a consideration of means and ends, which makes it superior to mere unexpressed feeling.

Still another possible stage is added through a further specification. "Choice" denotes "motor or instrumental behavior," "implementation," and "acting upon preference." If this fourth stage follows a consideration of means and ends it is considered mature, but if it consists purely of "motor or instrumental behavior" it is inferior to considered implementation. This is the key error. By describing "choice behavior" apart from "feeling behavior," Super would have us believe that an individual can choose without having a basis for *choosing*. Beyond the terminological confusion in Super's statements lie the basic conceptual errors described by Angyal and Watts (See Chapter 4, pp. 17, 18). Behavior is Conceptually fragmented, the various fragments are labeled, and these labels are then treated as if they represented identifiable entities or processes. It therefore becomes "possible" to state that there is *no* reason for some choices because the choices cannot realistically be implemented; a "bad (emotional) reason" is not a reason.

Although particularly illustrative of the linguistic difficulties inherent in Super's atomistic approach, the above excerpt is also fully representative in a basic conceptual sense. Hence the same criticisma are applicable to such clear and concise statements as the following:

> *Crystallization*. As we have seen above, the crystallization of a vocational preference is the process of formulating a generalized vocational goal. It takes place in early and middle adolescence It is *at its best, and essentially, a cognitive process*. (Super, *et al*., 1963, p. 84)

In this case, cognitive behavior is considered "above" as well as apart from the "feeling behaviors" upon which choice was partially based, and apart from the inevitable changes in such bases as the individual adds to his experience. Not only is such cognition considered separately with regard to the immediate process of behaving, it is also given a specific developmental stage in which to take place, at least with regard to choosing vocational goals.

Career Development: Choice and Adjustment
Tiedeman and O'Hara (1963)

Tiedeman and O'Hara have prepared their own "up-to-date discussion" of vocational development for the College Entrance Examination Board Essays (Tiedeman and O'Hara, 1963). Their essay has anticipated the present writer's departure in several key areas.

First, Tiedeman and O'Hara have added an agent--a "doer"--to the developmental process described by Super. By making explicit the power of an individual's purpose to shape choice and action, Tiedeman and O'Hara have included some of the dynamic aspects inherent in human behavior.

Second, Tiedeman and O'Hara have recognized the "other half" of the developmental process, i.e., the situation(s) in which actions take place. Hence their model reflects more (though not nearly all) of the contingent nature of choosing actions and goals which is inherent in Wiener's cybernetic concepts (Wiener, 1954, Chapters I and III). In this sense, even though Super suggests a contingent formation of (the) self-concept, its implementation or translation more closely resembles the pre-determined behavior of Liebnitz' "clockwork figures" (ibid., p. 22).

Finally, Tiedeman and O'Hara have made their concept of career development more explicit than Super's. Thus it continues through and beyond the "arrival" described by Super, in that purpose continues to direct the pursuit of personal advantage throughout the career.

Beyond these substantial contributions to the development of vocational theory, the present writer has added only one major *content* factor, i.e., a consideration of the origins of purpose. In this sense Super deals with choice without origin, Tiedeman and O'Hara deal with purpose as one origin of choice, and the present writer considers the origins of both choice and purpose. This point will be elaborated in the following review of the Tiedeman and O'Hara essay.

The contribution to vocational theory made by Tiedeman and O'Hara involves far more than the conceptual *additions* just mentioned with regard to Super's statements. There is a basic *conceptual change* as well, although it is barely implied in the preceding discussion. In one sense they aspire to the same sort of basic theoretical clarification as that proposed in this chapter, i.e., "clarification of the problem of development in the relationship of personality and career" (Tiedeman and O'Hara, 1963, p. iv). Consequently their consideration has greatly clarified (1) the continuous, ongoing nature of the developmental process, (2) the power of both purpose and situation to influence behavior, and (3) the dynamic conceptual metamorphoses which result from this process.

> Career development refers to those aspects of the continuous unbroken flow of a person's experience that are of relevance to his fashioning of an identity "at work" (Tiedeman and O'Hara, 1963, p. 2).
>
> . . . .
>
> Finally, man can act with purpose. A great deal of man's behavior can be understood if we can but understand his purposes. Purposes are set deliberately although all of their ramifications may not be fully realized. Purposes can be modified by thoughtful evaluation of prior events. Purposes can be set anew from analyses of previous circumstances and from anticipation of new ones. In writing a theory of career development, then, we must recognize that we strive for linguistic representations which will:
>
> 1. Portray the experiencing of an event as faithfully as possible;
> 2. Recognize that thought about the meaning of an event may clarify the experience and condition the person to react differently in the future, and;
> 3. Acknowledge the influence of analysis and evaluation upon

> purpose and the subsequent influence of the purpose upon future experience. (Tiedeman and O'Hara, 1963, p. 3).

There are, however, two basic shortcomings in their essay, one involving content, and the other involving language. First, there is a separation of behavior into "types," with the result that two basic aspects are not considered adequately. One of these concerns the origin of purpose, as specified earlier. Thus the effect of the individual's current experiencing style upon the choice of purpose and action is considered as "given," as something that precedes the purposeful behavior they describe. In the writer's opinion this omission results from their unintegrated and incomplete consideration of a second basic aspect of behavior, i.e., the "non-cognitive" aspect.

The emotional, need-based directions manifested in choosing both goals and past-present-future actions are not really specified in their conceptual structure. While not denied, they are defined as "concomitants;"--implying "grafting-on"--rather than covariant-cofunctional aspects of a unitary process. Consequently only the cognitive aspects of experience, reflection, and choice are explicitly considered in their theoretical discussion of development and the mechanisms through which it takes place.

> The evolving ego-identity therefore creates a number of premises which frame an attitude about one's self in one's world. Hence, we may speak of this emerging psychological lifespace as a person's cognitive map of himself in the world. The elements of the cognitive map are within a person's awareness. The anger, joy, certainty, fear, doubt, envy, shame, and guilt surrounding many of the premises of this cognitive map are not necessarily fully appreciated by the person, however. These emotional concommitants of premises are not easy to know or to control. (Tiedeman and O'Hara 1963, p. 57).

Their proposed research involves the analysis of elements making up such cognitive maps. There is no operational consideration (1) of the fact that these elements were differentiated and integrated by just such uncontrolled, partially unknown emotions as those listed, and (2) that the choosing, for which such maps may be said to provide bases, is equally affected by such non-cognitive determinants. Consequently this first criticism is based upon the manner in which such pre-empirical descriptions direct investigation away from the total process of behavior. Choice of purpose or action cannot be understood entirely on the basis of cognition.

The second basic criticism involves an entirely different problem, i.e., the semantics of their presentation. In brief, the newly considered processes-activities of human behavior are denoted by terms derived from an earlier states-properties orientation. Consequently a reader can too easily "comprehend" the essay in terms of these obsolete referents.

Tiedeman and O'Hara have displayed a considerable conceptual freedom in moving above and beyond past contributions (a transition is clearly apparent in their earlier review of the Harvard Studies in Career Development in Chapter 1, this volume). However, a certain linguistic rigidity (1) has reduced their conceptual freedom to proceed from new theoretical intent to the development of new theoretical content, and (2) reduced the effectiveness of their theoretical presentation. The new referents are not explicitly substituted for or added to the old.

Because of this ambiguity of referents, the process of conceptually separating behavioral processes in order to define them becomes far too powerful an influence upon both reader and theorist. In their readers' experience, behavioral events are distorted by the language; processes ascribed a temporarily separate identity for communication can take on a permanent, conceptual identity through communication.

Tiedeman and O'Hara have not ignored this problem, as demonstrated by the following excerpt:

> Language provides a medium for symbolic representation of pertinent aspects of experience. In momentarily stopping the continuous flow of experience, language permits examination at least in symbolic reality if not in objective reality. The encapsulation of experience in language is akin to having only a bucketful of water to analyse and evaluate after that bucketful of water is removed from a swift-running brook (Weitz, 1961). (Tiedeman and O'Hara, 1963, p. 2; italics mine)

However, their use of the analogy seems to avoid the import of the word "only" when they continue:

> Language is merely a vehicle for the portrayal of an event; the event itself is not altered by discussion of it; the event does not suffer either from its encapsulation into language or from its later release from that condition. What can suffer in the linguistic portrayal of an event is the meaning that the event had for the one who experienced it. It is extremely difficult to convey this meaning from person to person. (Tiedeman and O'Hara, 1963, p. 2)

In the same way that water taken from a moving stream loses the dynamic characteristics of that stream--flow, wave, temperature, currents, and eddies--separated aspects of the "behavioral flow" lose their dynamic qualities. The full organization underlying the process (Wiener's "information") is no longer subject to investigation.

This linguistic problem accounts for the incomplete integration of non-cognitive behavioral determinants discussed earlier in this section. But perhaps more detrimental to the presentation of theory, their use of terms can lead to a distorted representation of behavior.

For example, their frequent references to self-concept and ego-identity do not portray sufficiently their definitional movement from self-concept^1 or ego-identity^1 (state-property) to self-concept^2 or ego-identity^2 (process). It would be preferable to describe their conceptual movement to self-conceptualizing, to self-experiencing to feeling aware of identity. In essence, though they write of processes, their terms conjure up images that are often static, without the dynamics of behavior.

This is the central problem to which the present writer has directed this essay. Beyond the addition of theoretical content regarding the origins of purpose in non-cognitive as well as cognitive experience, this essay has proposed a more process-denoting conceptual and linguistic frame, in order to portray human behavior more accurately.

Implications of Critique: The Need for Revision of Vocational Theory

A subjectmatter* must be defined to some degree before it can be studied effectively. If it is merely labeled, the definition becomes a "meaning" of that label, arising from the observer's approach, the future reader's inference, or perhaps even from common usage. Thus the investigator may employ clear, concise terms, yet have only a vague concept of the phenomena to which these terms refer. If this loose "term-referent" relationship exists during the design of research, the investigator cannot comprehend or convey his results. In the same way, an investigation must be defined before it can be reported. If the intended "term-referent" relationship is not specified in reports of research, the reader cannot be assumed to comprehend the investigator's information.

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* Following Dewey and Bentley (1949), the term "subjectmatter" is used to denote the phenomenological unity of the 'observed' and the act of 'observing.'

This is not to imply that pre-empirical definition must explain phenomena or even describe them accurately. Nor does such a statement deny that any definition requires prior empirical observation. However, it is necessary to choose some specific limited area in which to conduct scientific investigations. Consequently the need for definition preceding scientific observation involves a particular form of defining--e.g., delimitation.

For example, in behavioral science it is necessary to set apart for study some process taking place within the overall process of human life and culture. Some aspect of human living must be delimited, not only by an investigator's interests or technical capacities, not only by traditional labels, but also by the question which is to be asked regarding subsequent data.

Too frequently these questions, or hypotheses, are communicated through terms for which several referents are available. Therefore, subsequent conclusions cannot accurately convey the relationships among data which the investigator experienced.

Delimitation, then differs very little from what some scientists refer to as "understanding the problem," and one of the most important aspects of understanding the problem lies in the considered prediction that the subject phenomenon is separable for study. If this prediction--the pre-empirical delimitation--is too broad or too narrow, the organization of the subject phenomenon cannot fully be observed. The investigation becomes analogous to tuning a radio receiver in such a way as to get parts of more than one wave length, or to get only one "edge" of a particular broadcast. In terms of information theory, delimitation must permit "tuning" into a behavioral process containing more "message" than "noise."

"Just as entropy is a measure of disorganization, the information carried by a set of messages is a measure of organization" (Wiener, 1954, p. 21). It is in this area of predicting where 'system' or organization exists that vocational theory falls short of its purpose. Some of the theory reviewed subsequently is based almost entirely upon empirical data and methods; it purports only to "explain" or describe what was measured. Such theories, when narrow, serve more to justify their operational bases than to expand or redirect subsequent research. That which is delimited by them--the human behavior they point to--is conceptually as well as operationally atomized, with the result that the full organization of behavior cannot be approached more closely by subsequent investigation. This type of theory does not suggest where a more organized, systematic behavioral process might lie, but rather states where or what some aspects of the behavioral process were.

This problem is clearly stated by Newell and Simon.

> The path of scientific investigation in any field of knowledge records a response to two opposing pulls. On the one side, a powerful attraction is exerted by "good problems"--questions whose answers would represent fundamental advances in theory or would provide the basis for important applications. On the other side, strong pulls are exerted by "good techniques"--tools of observation and analysis that have proved to be incisive and reliable. (Newell and Simon, 1961, p. 2011)

It is their suggestion that the new computational technology can free investigators from the practical limits of data-processing. However, it is the present writer's feeling that without a concurrent freedom from narrow-range theory, future investigations will merely add complexity to those data without giving them integration and organization. The new computational techniques must be used to deal with more types of variables rather than just with larger samples or data from larger batteries of current, univariate assessment methods (Cooley, 1961).

On another dimension, some current vocational theories point less to the actual process of human behavior than to concepts about behavior. The concepts themselves frequently become something to measure, as if they, rather than behavior, were the basic subjectmatter.

> . . . Creeds, dogmas, and philosophical systems are only ideas about the truth, in the same way as words are not facts but only about facts. . . . [It is necessary] to focus the attention on reality itself, instead of on our intellectual and emotional reactions to reality--reality being that ever-changing, ever-growing, undefinable something known as'life', which will never stop for a moment for us to fit it satisfactorily into any rigid system of pigeon-holes and ideas. (Watts, 1958, p. 18)

The writer's theoretical structure is directed to just this problem, "to focus the attention on reality itself." It must be emphasized that "reality" is certainly not going to be described or represented accurately or fully; rather, it is intended (1) that various terms be considered substitutes for similar experiences on the part of writer and reader, and (2) that the terms establish a basis for expressing this similarity. To this end, then, the following section offers an argument for a revised delimitation of the subjectmatter currently labeled "vocational development."

An Approach to Revision through Subjectmatter:
(Conceptually Expanded - Operationally Focused)

The revision takes two basic directions, expansion and reduction of subjectmatter. The intention is to delimit an example of individual behavior which, though fully representative, is more manageable both conceptually and operationally.

1. Expansion: Current theoretical definitions implying the existence of such separable processes as "vocational behavior" are rejected. In their place is the expanded concept of 'behavior' as an inseparable process, as all that an individual does. No type, aspect, or level is considered fully apart from the over-all process.

> The application of the holistic principle to the study of human beings has far-reaching implications. We have a number of sciences related to the person, but we do not have a science of the person. Human physiology, psychology, and sociology deal with artificially separated aspects of the human organism, but, in spite of some promising starts, there does not as yet exist a science which studies the human person in his totality. If we admit that the human being is more than the mere aggregation of physiological, psychological, and social functions, that is, if the person as a whole has attributes which are neither the sum of the attributes of the parts nor deducible from the attributes of the parts, we must give up the hope that knowledge of the total person will ever emerge from such segmental studies. Just as complete information concerning the two lines which form an angle does not give us any knowledge about the angle itself, so knowledge of physiology, psychology, and sociology cannot result in a science of the total person. This means that, for the study of the total person, there is needed not a mere combination of the results of those sciences which study single aspects of the person, but an entirely new science. (Angyal, 1941, pp. 4-5)

Angyal's statement is not cited for its reference to a "new science" with an impossible degree of comprehensiveness, but to stress the present writer's position that there are no separable "functions" or "types of behavior." In the same way, 'development' is used to denote the ever-accumulating results of all individual behavior over time; it is never considered purely "vocational," "emotional," "sexual," or "intellectual."

Obviously this first revision would lead to untestable hypotheses; it is operationally impossible to study the "whole person," "total behavior," or "development." But this does not mean that the term(s) selected to delimit what is studied must necessarily hide from view the fact that a "whole person" did "behave totally." Even though it is not humanly possible to conceptualize or describe all aspects of actor or action, it is quite possible to recognize that an infinite number do exist. Not all are connoted by even the most comprehensive descriptive term because not all are experienced, even in the most vivid image or concept which a term might represent.

The writer's purpose is to express theory in terms which _do not rule out_ aspects of the referent behavior, aspects which may be functional and/or subject to experience by other observers with diverse frames of reference. This purpose is pursued through a reduction of subjectmatter, in essence an attempt to "express more about less."

2. _Reduction_: Although the process of individual behavior is originally over-simplified or considered _in toto_, the necessary conceptual and operational limits are derived from the context in which the behavior takes place. These are established by several conceptual steps.

First, the general "why" underlying a series of actions can be approached by considering _over-all_ individual purpose*:

In rational purposive behavior a plan for achieving an end-goal

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* It should not be inferred that use of the term "why" (here and on the following page) implies purely conscious or rational choice or bases for choice. Obviously "both" conscious and unconscious, rational and irrational aspects exist to some degree in all choices.

> must usually be supplemented by plans for achieving one or more subsidiary goals. Such a hierarchy of plans for achieving an end-goal constitutes the "cognitive structure" of purposive behavior. (French, 1954, p. 5)

Individuals act, then, to get from one experienced state to another, hopefully to approach a still more distant (anticipated and desired) state. This sense of purpose provides one basis for placing a particular instance of individual behavior--for example, a choice--into its developmental context.

However, an individual's general plans are not always so rigid or so unidimensional as French's statement implies, and particular actions are not so teleologically or "internally" determined. Instead, as stated by Angyal, there is another influence upon behavior:

> It is not the goal which defines the direction, but, on the contrary, the intrinsic pattern of a direction which defines what object can become a goal. (Angyal, 1958, p. 55)

Thus more distant goals are formed, modified, and pursued by actions which are chosen by the individual as he is at the time, as well as contingent to the immediately perceived situation. In addition to and together with the general, this more specific "why" is equally influential in shaping behavior.

> I have contrasted the prearranged behavior of the little figures on the music box on the one hand, and the contingent behavior of human beings and animals on the other.
>
> . . . .
>
> For any machine subject to a varied external environment to act effectively it is necessary that information concerning its own action be furnished to it as a part of the information on which it must continue to act.
>
> . . . .
>
> This control of a machine on the basis of its actual performance rather than its expected performance is known as feedback, and involves . . . elements which indicate (and adjust) performance. (Wiener, 1954, pp. 22-24)

Wiener's statements illustrate the contingent effects of situation and performance, as well as purpose or intention, upon the total process of behaving, and on the basis of these effects the present writer suggests a criterion to limit the observation of behavior.* This limitation avoids the semantic fallacy involved in denoting types of behavior, and it does so without disregarding the fact that individual behavior takes different forms and has different results at varying times and in varyi contexts.

It is proposed that such differences within the behavior displayed by an individual are functions of the following:

a. The complex of "distant" anticipated goals toward which idiosyncratic and contingent behavior is directed.

b. The results of the individual's development, defined as his acquired conceptualizing "tools" both for anticipating and choosing among distant goals and for adjusting immediate action-choices. In Wiener's terms development resembles a gradual increase in

> the property of being able to adjust future conduct by past performance. Feedback may be as simple as that of the common reflex, or it may be a higher order feedback, in which past experience is used not only to regulate specific movements, but also whole policies of behavior. Such a policy-feedback may, and often does, appear to be what we know under one aspect as a conditioned reflex, and under another as learning. (Wiener, 1954, p. 33)

c. The situation in which the immediate behavior takes place, both as it is and as the individual experiences it.

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*The writer is not proposing a cybernetic theory of behavior, and is not saying that the term "feedback" perfectly represents behavior, but rather that it forces the theorist to recognize that goal, purpose, situation, and personality-type, can and do operate together in shaping all actions, that actions must be thought of in terms of multiple (infinitely complex) causality (in theory), even if they cannot be so studied by an individual investigator.

d. The more specific manner in which the individual sees the situation with regard to his over-all purposes. Both c and d, in other words, become informational bases upon which to choose purposeful actions, while a and b affect the way the information will be used. However, the four factors just listed suggest a choosing process which is far too perfect to reflect human behavior at all accurately. The "error" factor has not been included.

> The commands through which we exercise our control over our environment are a kind of information which we impart to it. Like any form of information, these commands are subject to disorganization in transit. They generally come through in less coherent fashion and certainly not more coherently than they were sent. (Wiener, 1954, p. 17)

Perhaps the most irrefutable example of this phenomenon lies in the process of bidding in contract bridge. Information is offered for specific purposes, but without a skilled or familiar partner very little accurate communication is reflected in subsequent events.

There is an additional distorting factor relevant to the choosing process under examination. Just as chosen future actions (output) do not always serve to implement their purposes, prior choices of action will not reflect a valid assessment of the situation (input).

> . . . External messages are not taken _neat_, but through the internal transforming powers of the apparatus. . . . The information is then turned into a new form available for the further stages of performance. (Wiener, 1954, pp. 26, 27)

e. This latter distortion of information provides the final basis for reducing the subjectmatter. If it can be said (1) that choice reflects the bases upon which choice was made, and (2) that the two bases, over-all purpose and immediate situation, can be identified and _conceptually_ "filtered out," then additional bases can be deduced from the remaining data. Thus these data should reflect more of the "error factor," or idiosyncratic "experiencing style" of the individual. In this sense, the proposed theoretical structure is designed partially to focus investigation upon the effects such _styles_ have upon behavior.

In summary, it is proposed that total behavior be _considered_ (wider theoretical limits), but _studied_ in a specific defined situation (narrower operational limits). It is proposed that _all_ behavior in this situation is relevant, in that it represents or is to some degree "typical of" the individual. If the situation is limited, then, it may become practical to seek more determinants of behavior (though certainly not all).

Focus: Experiencing - Conceptualizing Style as the Determinant of the Process of Choosing

The _operational_ focus of this paper is upon the power of experiencing-conceptualizing style to influence manifest behavior by shaping the process of choosing among alternative actions or reasons for acting. No particular concept or a type of concept is central insofar as the theory is concerned; the proposed structure provides "space" for any and all concepts. But the _operational proposal_ is limited to various concepts of self in vocational situations. Thus, manifest (i.e., chosen) and/or planned individual behavior in the vocational situation will be examined for evidence of those feelings and concepts upon which the choice to plan or act was based.

The general hypothesis is that as an individual has approached the problem of choosing, so will he approach future choices. More specifically, individual consistency is seen more clearly in style of choosing than in manifest results of choosing. However, choosing style itself results from the ways in which individuals have come to experience anticipated alternatives for future actions relating (conceptions of) self and (conceptions of) situation.

Conceptions arise in turn from experience and reflection upon experience, both of which are themselves influenced by experiencing style. Thus, the individual's behavioral consistency is displayed not only in what he chooses, not only in how he chooses, but also within the experienced alternatives from which he chooses.

Alternatives are themselves the conceptual creations of the individual, created from the everchanging raw material of situation and self. If it can be more fully understood (1) what the situational "raw material" was at the time of experiencing, and (2) what the subsequent choice was, it may be possible to interpolate the conceptual-emotional process followed by the choosing individual. In this sense the proposed structure is offered as a guide for interpolation.

This process of interpolation resembles the approach to dream analysis proposed by French (1954). If the terms 'vocational choice' or 'aspiration' are substituted for 'dream' or 'dream work,' and 'need to choose' for 'unconscious conflicts,' French's statements parallel the present writer's proposal:

> Like other behavior, dreams react to present situations according to patterns acquired in the past. (French, 1954, p. 20)
>
> Dreams also give us a key to the dreamer's personality structure. Freud called them the 'royal road to the Unconscious'. They reveal not only the dreamer's unconscious motives but also his characteristic ways of reacting to his unconscious conflicts. (French, 1954, p. 3)

One additional point must be emphasized prior to the development of the theoretical structure. The model might appear to be wholly phenomenological, to bear no relationship to the writer's claim that the structure permits fuller, more integrated investigation of the "total" subjectmatter of individual behavior-in-situation. However, this is not the case; the structure is only centered in the realm of individual experiencing, or phenomenology. That of behavior which is consciously chosen in reaction to experienced situation is to some degree chosen on the basis of phenomenological processes. However, the term phenomenology describes the process of individual experiencing and therefore implies that individuals will vary in that which they experience from a given situation. What it does not imply is a consideration regarding the source of these differences. In other words, the basic sources of individual variation in the experiencing process are not fully covered by phenomenological theory.

The fact that physical processes underlie all "mental" processes suggests that these "mental" processes are subject to physical influence, both immediate (those currently affecting the entire organism) and past (those which have served to shape the physical "mechanisms" by which "mental" processes take place). Thus not all individual "experiencing style" must be attributed to the results and nature of purely "mental" processes in order for a theoretical structure to represent human behavior. For example, if perception is taken as part of experiencing, then whatever affects perception will also affect experiencing. There is a tremendous amount of data regarding the effects upon perception of such factors as hunger or dietary imbalance, maturational "stage," fluctuations among biochemical balances, fatigue, and the broad category of emotional disturbance (Blake and Ramsey, 1951).

The writer's model differs from phenomenological models in that those factors which contribute to individual differences in experiencing style, ranging from the physical to the cultural, are not ruled out by the theoretical structure. Rather, the structure is designed to direct investigation toward all sources of individual experiencing styles as these sources are reflected in the manifest effects of style upon the choice of actions in known situations. *The writer recognizes that these sources lie in infinitely diverse areas, not all of which can be included in one individual's empirical research*. However, this human limitation--and even its implied disciplinary limitation--does not justify a theoretical limitation. "In brief, it has become necessary to redefine what is to be assessed, and to free definition from the operational limitations inherent in current techniques" (Field, Kehas, and Tiedeman, 1962).

Development of a Structural Model

A. "Ideal" Individual Choice

An *ideal* vocational choice is one that would provide the greatest congruence between the relevant characteristics, states, or properties of both the individual and the job. Thus it would involve the decision to enter a position at a point in time in which certain hypothetical criteria would be satisfied, specifically those requiring that individual capacities and needs fully match the requirements and rewards of the position.

This concept of "ideal choice" is necessary to establish a comprehensive, relevant structure in terms of which to analyze the individual's manifest choices. The structure makes it possible to evaluate such observable choices in context, i.e., with regard to their relation to individual development. These criteria will be established by categorizing positions according to the current "characteristics" of a particular individual. Thus positions will be grouped into (1) those in which the individual could and for any reason could not perform, (2) those which would and would not satisfy the individual's requirements and desires, and(3) those involving characteristic activities-in-situations which the individual would or would not be willing to perform. There are three such basic criteria.

1. "Can Perform":

The first of these groups is established by the fact that there are certain absolute limits to the functions an individual is capable of performing. Individual characteristics with regard to physical strength and coordination, manual dexterity, intellectual capacity, and education or training establish such limits. There are also limitations regarding the functions an individual is provided the opportunity to perform, or permitted to perform at all. Race, religion, law, custom, and other socio-cultural factors establish this second equally powerful type of limit. In addition, each individual position requires certain minimal functional performances of its incumbents. These may involve production of specific services or products, and/or fulfillment of others' (frequently less functional or less rational) expectations (Gross, Mason, and McEachern, 1958).

The fact that both positional requirements and individual limitations exist at a given point in time results in the additional fact that there is a certain group of positions in which an individual can perform, and another in which he cannot. For that individual, then, positions can be categorized into two mutually exclusive groups.

2. "Wants in Return":

A second criterion can be established in terms of the various types of rewards offered (1) by an occupation, and (2) by a position. Such rewards range from the material to the intrinsic, and for the purposes of this particular criterion are considered to include primarily socially-determined rewards. In other words, these would be the rewards commonly held to result from being a member of a particular occupation. Status, standard of living, general working conditions, remuneration--these types of reward are commonly held to vary according to occupation. The same is true regarding feelings of satisfaction, worth, or contribution to society, although here there is far more room for individual variation. For example there are instances where, for religious or other reasons, individuals forego all such rewards as these. With no claim to rigor, the writer merely suggests that in such cases, other types of reward or satisfaction take the place of more usual varieties.

A different type of reward results from the unique nature of each position within any one occupation; however, these are more relevant to the third criterion.

3. "Willing to Undertake":

This final criterion derives almost wholly from the particular conditions, associations, and special requirements characteristic of the particular position. It separates those positions in which the individual would and would not find himself willing to persevere in performing the required functions in return for the offered rewards. This criterion may be conceptualized as an activity "bridge" or "medium" by means of which a vocational exchange or "barter" takes place.*

The traditional manner of analyzing vocational choice has been to determine the degree to which the individual could offer what the job required, or to which the job could offer what the individual required. The explicit concept of work as a process, as an activity-in-situation, is not typical of the literature. While not denied, process tends to be obscured when individuals are considered as group members and/or when positions are considered to be fully representative of an occupation.

The writer's concept of ideal choice goes beyond this "matching" of states-properties; it is proposed that process-activity variables play an equally central role in determining the effects of vocational choice upon individual development. Thus they provide the basis for a third criterion, i.e., willingness to undertake (and persevere).

Figure 4.1 represents a categorization of positions in terms relevant to a particular individual, following the criteria established above.

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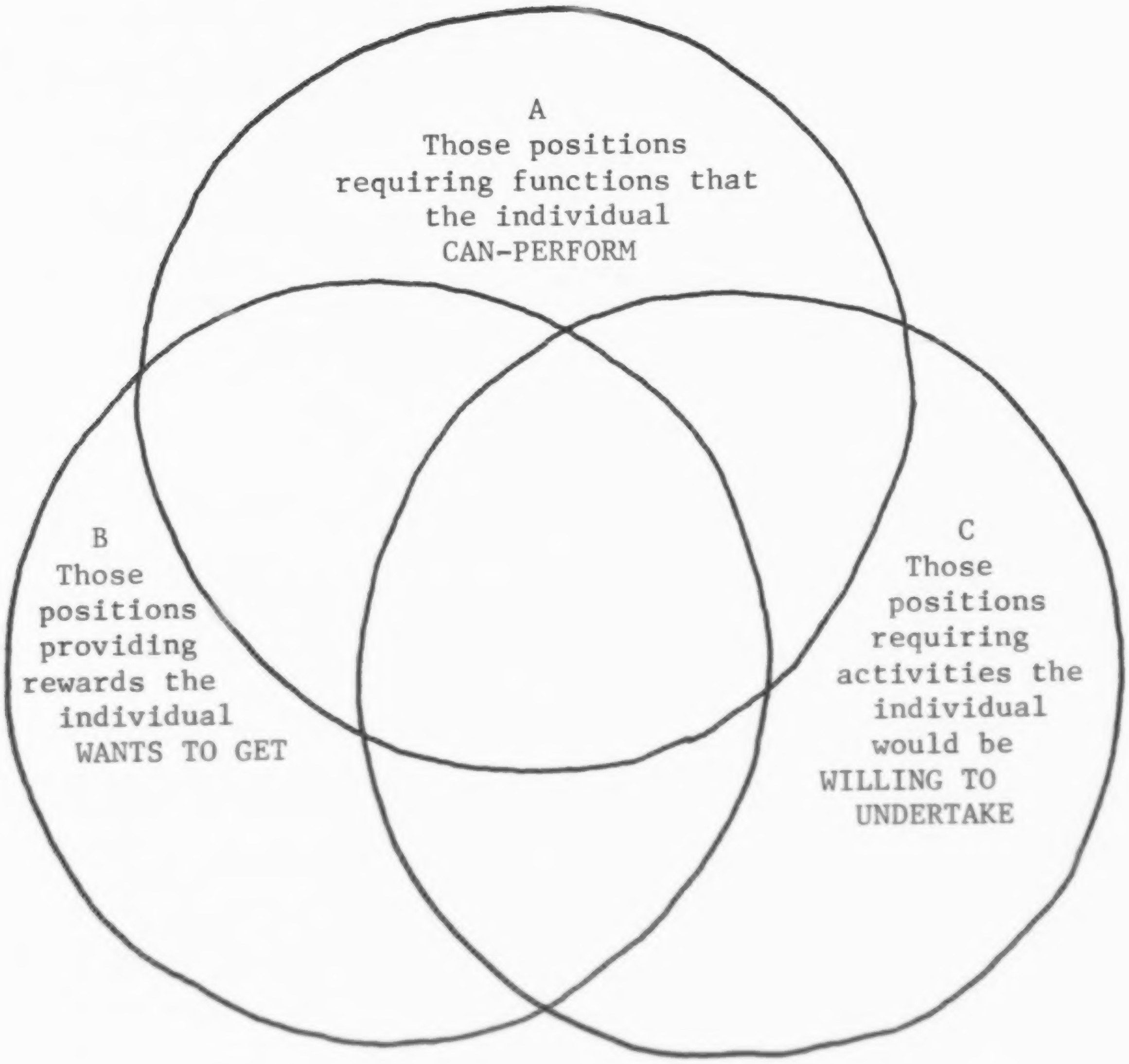
*This concept of barter can become unnecessarily complex; the individual might only appear to perform the required functions, or the rewards may be almost entirely intrinsic (even "intrapsychic"). However, all that is implied is that the individual be maintained in the position and sustained in life--through an occupation.


A
Those positions requiring functions that the individual CAN-PERFORM
B
Those positions providing rewards the individual WANTS TO GET
C
Those positions requiring activities the individual would be WILLING TO UNDERTAKE

ALL OTHER POSITIONS, involving functions, rewards, and conditions such that the individual

CAN'T DO

DOES NOT WANT TO GET

WOULD NOT BE WILLING
TO UNDERTAKE

Figure 4.1

In order to be considered ideal, then, a particular choice would have to result in entry into a position which in fact satisfied all three of these criteria, regardless of whether or not the individual was aware of the fact. This concept will be further clarified by consideration of the manifest choices displayed by individuals.

B. Manifest Individual Choice

A manifest (as opposed to an ideal) choice may be reported by an individual in terms of plans to enter or prepare for (1) an occupation or type of occupation, or (2) a position or type of position. In addition, prior choice is implicit within the fact that an individual may occupy or be preparing for a particular position. All such choices are reflected through actions--i.e., in behavior--and, like all behavior, choices reflect the bases upon which they were made.

> Anthropologists have realized in recent years that people of cultures other than our own not only act differently but have a different basis for their behavior. They act upon different premises; they perceive reality differently, and codify it differently. (Lee, 1956, p. 120)

To a limited extent this explains some of the differences in behavior displayed by members of our own culture as well. Thus vocational choices reflect prior conceptualization regarding (then) current self, potential or ideal self, the process of working, and the situations in which work takes place. Any or all of these concepts may be incomplete or inaccurate as they are "held" by the individual at the point of choosing. As a result, subsequent choice is not likely to be ideal in terms of the criteria established above. One or more of the criteria may not have been considered, or may have been over-emphasized. Concepts of self, work, and working may not be accurate or clearly held. However, any manifest choice is based to a great degree upon the individual's conceptualizations regarding himself, work, and working. Consequently, whatever an individual has chosen, entered, or even reports plans to enter, does provide information concerning what he thinks he is, what he thinks work is, what he thinks is involved in the process of working, and what he would like to become.

The value of the model thus far is that it provides a structured way of looking at the individual's choice--as an example of "whole" behavior--in such a way that some functional determinants of behavior are clarified. However, in order for the model to represent more fully the reality of total human behavior, it is necessary to include other variables known to be functional. Perhaps the most obvious of these is time; behavior is a process and consequently takes place over a period of time.

One of the most important additions to the concepts underlying vocational psychology is that of vocational development rather than isolated choice or entry position. Fluid concepts of career and career pattern have been added to the more static concepts of occupation or vocation (Super, 1953). A similar approach will be taken in the following discussion, in that (1) a definition of ideal individual development will be proposed against which (2) manifest individual development may be analyzed from a structured point of view. In essence, then, the following models will add the time dimension to those criteria discussed above, in order that information regarding individual behavior over time (development) can be deduced from the nature of current behavior.

C. The Ideal Process of Development

At any given point in time, ideal development can be represented in terms of the above-mentioned criteria of *can perform, wants in return*, and *willing to undertake*. It is, in other words, similar to ideal choice. But in addition it must be based upon an awareness that both individuals and positions change with the passage of time. Some of this observable change is the result of characteristics inherent in the position, perhaps even apart from the individuals involved. Social or cultural changes are frequently paralled by changes in the characteristics of particular positions; for example, increased educational opportunity has led to higher educational requirements for many positions. More relevant to the understanding of individual vocational development, however, is the fact that individual and position will, through the transaction of daily performance (activity) alter one another's characteristic states-properties to a considerable degree. Thus Rapaport's commentary upon psychoanalytic theory has considerable relevance for the construction of vocational theory as well:

> In psychoanalytic theory structures play such a crucial role that as long as the propensities and change of psychological structure cannot be expressed in the same dimensions as psychological processes, dimensional quantification is but a pious hope. In other words, the study of the process of psychological structure formation seems to be the prime requisite for progress toward dimensional quantification. We must establish how processes turn into structures, how structure, once formed, changes, and how it gives rise to and influences processes. (Rapaport, 1960, pp. 98-99)

In vocational terms, then the writer's model suggests that individual development (process) bears a similar covariant-cofunctional relationship to those vocationally relevant states-properties (structures) upon which most current vocational research is based.

Development would become ideal when certain additional criteria were satisfied. First, the changes which occur over time must be of such a nature that future requirements upon and of the individual will not exceed his capacity and willingness, or the capacity of the position to satisfy and reward. In addition, the changes in positional requirements and rewards must be of such a nature that they continue to fit the most likely development of the individual; a position must not require more and more of a function that the individual will not be able to perform or will not want to continue performing.

In order to develop these concepts more clearly, certain special definitions are necessary. These involve the concepts of value, goal, purpose, and self, all of which must be expressed in terms of individual behavior-in-situation rather than in the traditional sense of abstract "entities," or states-properties of ("possessed" by) individuals. It must be established that these and other such concepts represent characteristic behavioral proclivities or tendencies, and for the present are "realities" only to the extent that it is possible to observe their results in chosen or manifest actions.

As implied earlier, these "new" definitions involve more modern referents for conventional terms, referents involving processes as well as properties. For example,

> Complex electronic devices using feedback mechanisms to secure adaptive behavior have clarified concepts such as "goal seeking" and "learning" and have showed how these concepts could be made operational. (Newell and Simon, 1961, p. 201)

As such "artificial" behavior becomes more and more closely akin to human actions, such terms connote less immeasurable and less anthropomorphic behavioral determinants. The "moth-bedbug" machines constructed at the Massachusetts Institute of Technology are not best described as "possessing purpose," but they do behave in a purposeful manner (Wiener, 1954, pp. 165ff.).

There is a vital distinction to be made at this point. Tropistic machines react to stimuli from a "goal" which exists at the time of the reaction. It should not be inferred from the analogy that the same mechanism is proposed as (either) an explanation (or representation) of human behavior with regard to "vocational goals". Such goals do not "exist" at the time they affect behavior; what exists is the individual's reaction to an imaginary, anticipated relationship to the equally imaginary, anticipated goal.

Thus the following use of terms does not imply "action at a distance" or a "causal chain". It is merely an attempt to suggest some of the processes underlying commonly connoted state-property referents of the terms, to make them more operational, in other words.

1. Value

It is common to find reference to the fact that X individual "has middle-class values," with the implication that the noun represents a set of entities "possessed by" the individual. However, a more operational use of the term bears no essential difference from Webster's definition of the verb "to value":

> To rate in usefulness, excellence, etc.; to place in a scale of values; as to value honor above riches. (Webster's New Collegiate Dictionary, 1953, p. 940)

An individual might choose in accordance with the following hypothetical stages: "In the professional practice of law, I see the greatest opportunity to display honorable actions. I am drawn toward the image of myself in such a situation. I will try to become a lawyer."

Does this mean he "has a lawyer's values"? What if he later finds himself more attracted to the practice of medicine or teaching--does this reflect a "change in his values" or in the *results of his valuing*? I.e., is it perhaps more heuristic to guess that he learned more about medicine and/or law, and subsequently experienced more satisfaction in "trying on" the role of physician? In *this* sense the individual's values are really no more than perceptual styles, sets, or preconceptions, which result in certain anticipated events or situations being experienced in certain ways, with the consequently strong likelihood of certain subsequent behavioral results--choices.

2. Goal

The individual's development of a certain pattern of hierarchy of values contributing to his "experiencing style" results in the setting of certain imaginary future situations as being more *desirable*--as goals. The individual then takes on the task of choosing those actions which, in the context of the perceived situation, appear likely to facilitate the achievement of those goals he has chosen. Again, the chosen goal does not "draw" the individual, because it exists only as a present "result of valuing" anticipated or *proceived* future situations.

3. Purpose

This concept is used here to represent a characteristic pattern within individual behavior, or choices among actions, which is the result of the individual's "testing" the effects of behavior against progress toward the chosen goal. It is, therefore, that pattern resulting from a process resembling "policy feedback"; consistency results from the fact that individual behavior over time will reflect direction because its observed results are continually compared to those results assumed to be required for the step-by-step achievement of goal. (Wiener, 1954, p. 33)

An additional qualification is necessary at this point. The cybernetic analogy does not provide for the fact that human "feedback" is not purely rational or entirely conscious. Hence the writer's proposed definition applies equally well to the consistency of a neurotic's behavior; the neurotic process parallels the valuing process and the basic consistency among symtoms parallels that direction termed "purposeful" by the writer. To some degree, then, the following relates closely to psychoanalytic concepts, although no attempt has been made to establish the relationship.

From this point it is possible through conceptual fragmentation to describe an ideal process of individual development-in-occupation. "First," the individual would assess himself in order to determine (1) his current abilities and capacities, (2) his ultimate or potential capacities, and (3) his requirements and desires. In other words, he would evaluate himself in terms of the established criteria.

The "next step" would involve an assessment of the world of work, in order to determine what is required, what is offered, and how and under what conditions the working relationship takes place. Ordinarily this would proceed from the evaluation in which the individual's own criteria (values) are used to categorize positions as satisfactory or unsatisfactory.

This process can be represented in pheromenological terms, which has advantages for the development of a model. First, the individual forms concepts of self (or consciously considers those concepts which have been held up to that point, however incomplete). During the course of development this will take place many times and in many different contexts; however, certain consistencies will exist among these concepts because of the acquired experiencing style of the individual.

These same consistencies will appear in the individual's continuing assessments of the "reality" outside himself. Although new information is constantly added, or at least becomes available, the over-all effects of such experiencing style will be observable throughout any significant period of time.

Finally, the individual continually develops, "tries on," and maintains concepts of an ideal self. This is an image of self-in-situation or activity which becomes the goal (which was chosen upon the basis of values, and is to be achieved by the pursuit of a purposeful series of action-choices). The process itself is represented by Figure 4.2.

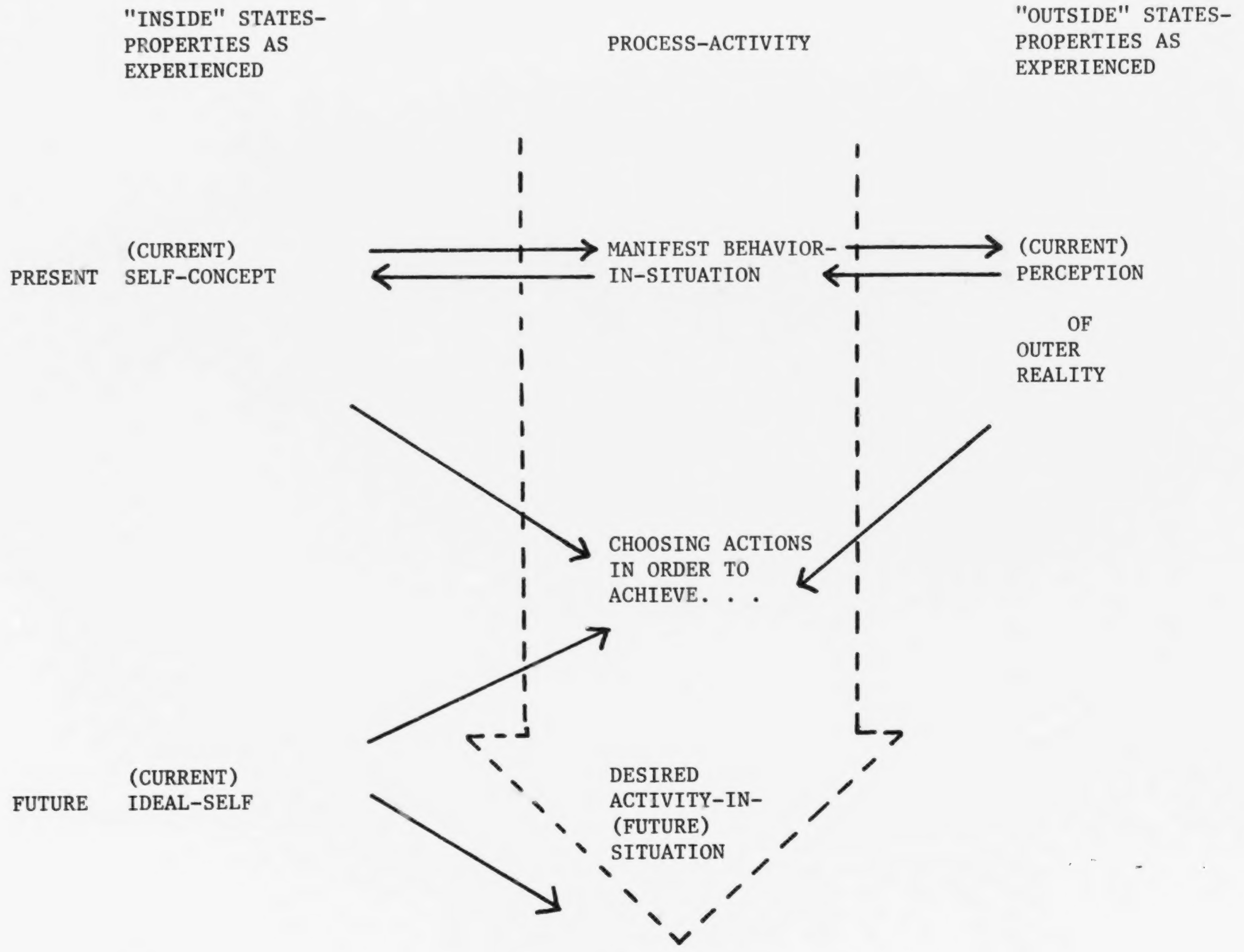

"INSIDE" STATES-
PROPERTIES AS
EXPERIENCED
PROCESS-ACTIVITY
"OUTSIDE" STATES-
PROPERTIES AS
EXPERIENCED
PRESENT
(CURRENT)
SELF-CONCEPT
MANIFEST BEHAVIOR-
IN-SITUATION
(CURRENT)
PERCEPTION
OF
OUTER
REALITY
CHOOSING ACTIONS
IN ORDER TO
ACHIEVE. . .
FUTURE
(CURRENT)
IDEAL-SELF
DESIRED
ACTIVITY-IN-
(FUTURE)
SITUATION

Figure 4.2

Thus the gradually evolving ideal self provides the basis for evaluating the individual's likely progress toward goal, or aspiration, or proception of self-in-situation. At a point in time, a self concept is seen in a transaction of self-in-situation, the situation being the evolving perception of outer reality. Individual behavior-in-situation, then, is the result of constant choice of, and adjustment through, actions chosen to provide the desired integration of ideal self and self concept. Consistencies or themes within individual behavior-in-situation are the results of this "feedback" process.

It must be noted that ideal development would require the current self concepts to be congruent with the "actual" self, and the perception of outer reality to be congruent with "reality" itself. Since neither of these perceptions is going to be completely accurate, clearly no purpose or feedback system is going to result in perfect achievement of goal. However, with the establishment of an ideal model of individual development-in-occupation it becomes possible to approach the analysis of an individual's manifest development in a structured, and consequently more comprehensive manner.

D. The Manifest Process of Development

In the case of ideal vs. manifest choice, the ideal representation provides a structured way of looking at data, i.e., at manifest individual behavior-in-choosing. In the case of ideal vs. manifest development, the ideal model provides a similar basis for structuring the observation of manifest individual development.

It has been established that individuals are not fully capable of assessing self, work, or the process of working. Acting through the formation and modification of perceptual styles, values affect moment-to-moment experiencing as well as the choosing of goals. The same sort of effects result from other factors such as the feasibility of the goals themselves, the steps through which they are to be achieved, pathology, capacity, and the general category of changing external stimuli. Thus an individual develops limits upon (1) the development of values-goals-purposes, (2) the accurate perception and/or retaining of information from external reality, and (3) the feedback process of adjusting behavior-in-situation to maintain purposeful pursuit of goal.

In other words, distortions affect individual assessment of states and properties of self and external reality, and therefore affect the feedback system for assessing the results of process or activity as well. X is not sure what and where he is, where he wants to go, how to get there, how to tell whether or not he is headed in the right direction, and whether or not he will be satisfied when and if he gets there.

By permitting a structured comparison (1) of his perceptions of and answers to these questions, and (2) of measurements (i.e., "experts'" perceptions) regarding the same questions, the model will suggest (a) the distortions in his perceiving, and (b) the sources of those distortions.

The following incongruities are predicted from the model:

1. Self experiencing is not accurate or complete; there is an aspect of behavior which can be described as "unconscious," and which is not available to the individual when he experiences or consciously assesses himself.

2. The experiencing of outer reality will not represent an

accurate assessment; again, the unconscious, or perceptual style will result in the acquisition of incomplete and imperfect information.

3. The ideal self will differ from both the real (or potential) self and the self concept, with the result that plans based upon the desire to achieve the "state of the ideal self" will not provide a fully satisfactory basis for the establishment of purpose and the process of feedback.

4. The individual's perception of self-in-situation (of the process in which he is involved) will not be entirely accurate. Hence feedback adjustments of behavior through the assessment of the results of behavior will not provide the desired maintenance of purpose.

To some degree, then, all observed individual behavior will reflect the effects of one or more of these inconsistencies between reality and experience. Furthermore, the feedback mechanism through which these distortions become manifest is such that there will be a consistency within the results of these distortions: the observation of behavioral themes within an individual's actions will lead to a greater understanding of the nature and sources of these distorting styles.

Figure 4.3 represents the process in a more dynamic manner than the previous figures, in that both time and reality are included in the structure, as they are in actual behavior.

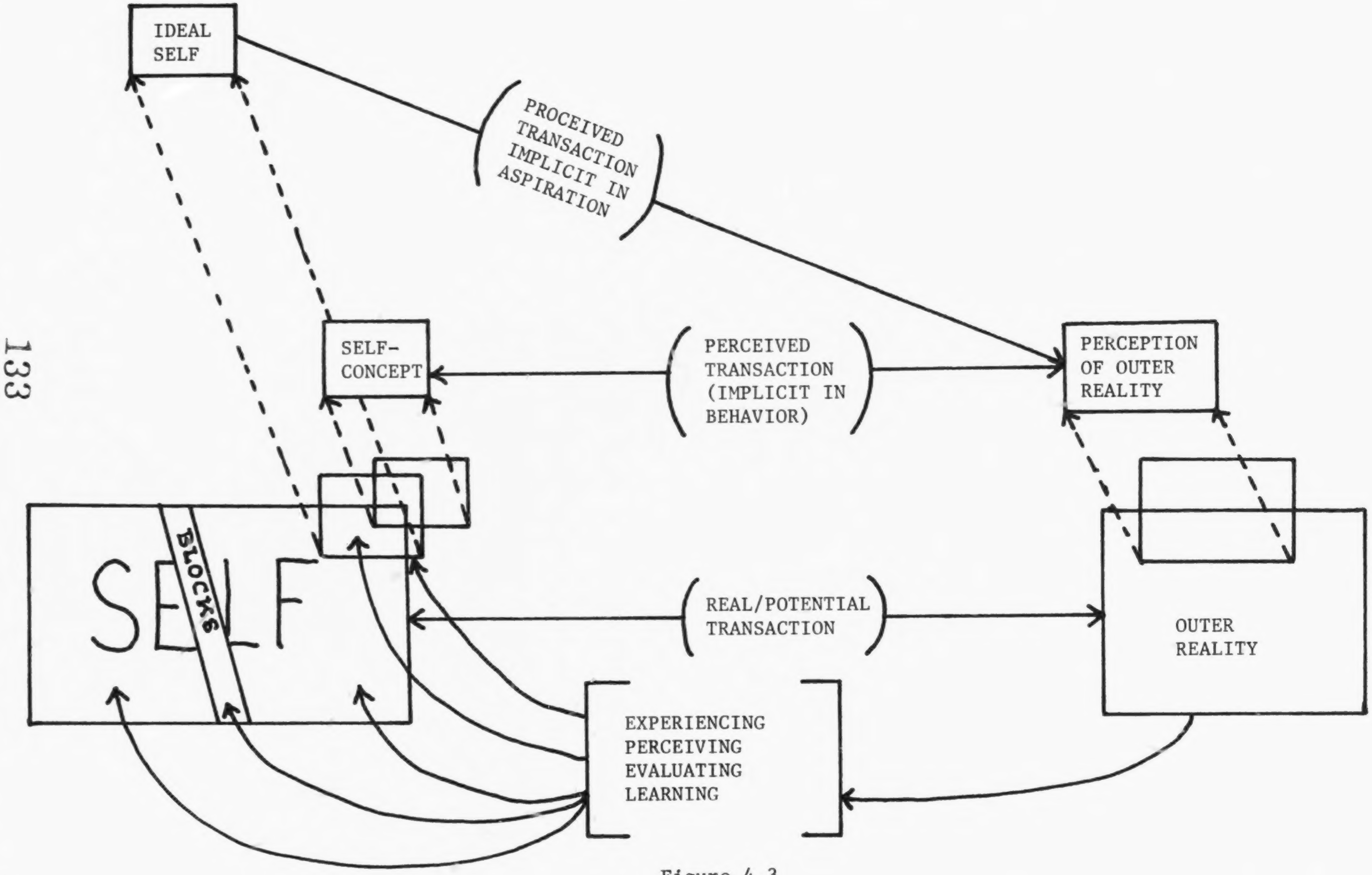

IDEAL SELF
PROCEIVED TRANSACTION IMPLICIT IN ASPIRATION
SELF-CONCEPT
PERCEIVED TRANSACTION (IMPLICIT IN BEHAVIOR)
PERCEPTION OF OUTER REALITY
SELF
BLOCKS
REAL/POTENTIAL TRANSACTION
OUTER REALITY
EXPERIENCING
PERCEIVING
EVALUATING
LEARNING

Figure 4.3

Following Rogers, the model suggests that concepts of current self and ideal self are "drawn from" the real self. This process is similar to that represented by Rogers as "symbolizing into consciousness or awareness: (Rogers, 1951). Thus certain facts about self, or events revealing characteristic properties and actions of self, are perceived relatively clearly and may be held as data for subsequent assessments of self. Other such information is not perceived clearly, or is not remembered clearly, with the result that certain aspects of self and outer reality are not available as bases for choosing and evaluating behavior.

A similar mechanism works an an individual attempts to assess what he might become (i.e., form an ideal self). Information from observation of self, outer reality, and the individual's behavior-in-situation, may or may not be "filtered through" the current experiencing process in such a way as to be available to awareness.

As represented in Figure 4.4, data falling into the blocked-off area will therefore lead to distortion in self-conceptualizing (or perception of outer reality, or self-in-reality, or the results of behavior). In addition, as suggested by Figure 4.5, some false data may be "drawn up," data which is not perceivable within reality. Thus concepts of self as possessing a certain characteristic or the capacity to perform a certain action may or may not be "true" of self. The same sort of mechanism can operate as the individual experiences outer reality and/or the results of his actions-in-situation.

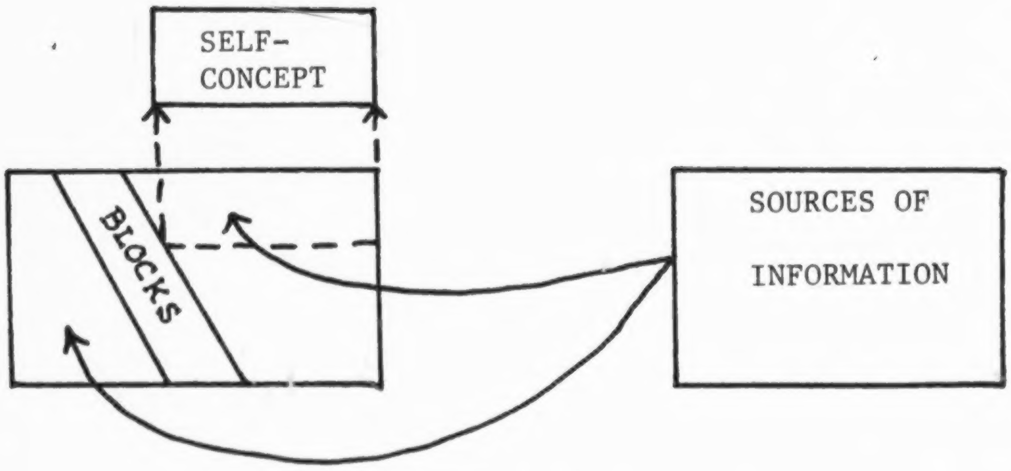

SELF-
CONCEPT
BLOCKS
SOURCES OF
INFORMATION

Figure 4.4

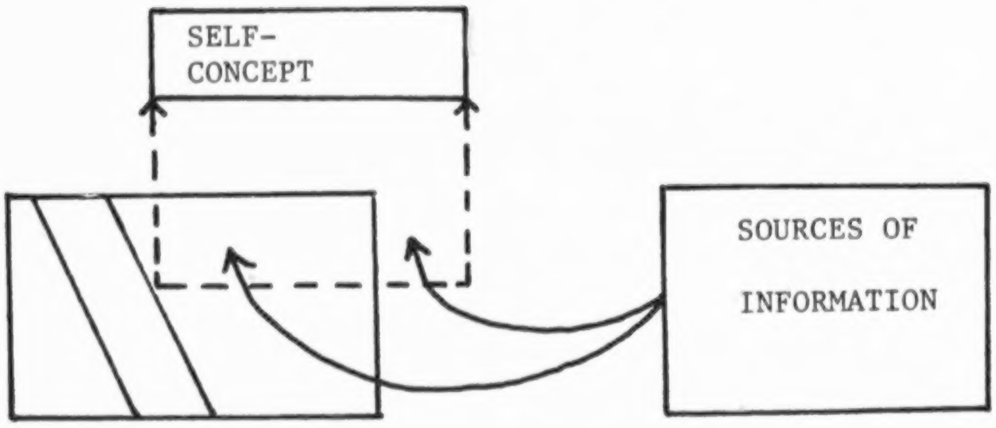

SELF-
CONCEPT
SOURCES OF
INFORMATION

Figure 4.5

A major hypothesis based upon the model is that each "aspect" of self--i.e., real-potential self, self-as-experienced, and self-as-described--can be described as if it were involved in a different transactional process. Though all three conceptual aspects affect behavior jointly, each is separately defined below, following Figure 4.3.

1. The Proceived Transaction

One of these processes of transaction is purely conceptual; the ideal self is proceived in a transaction with reality as experienced. In other words, the individual imagines future situations and activities in which he "places himself" in an attempt to anticipate "what it would be like"--to guess how he would feel. The transaction, type of transaction, that "feels best" then becomes a source of anticipated satisfaction. In this sense the individual holds an image of a transaction involving a combination of states and activities to which he aspires (his goal). In terms of the criteria established for an ideal choice, this aspiration or proception may involve the same sort of individual errors and omissions as a manifest choice. Thus it may involve nothing beyond a certain degree of status or a certain level of income, with other considerations such as individual capacity, positional requirements, or the full nature of the transactional process being underemphasized or neglected altogether. If such neglect involves an erroneous assumption by the individual that he possesses a particular capacity, the individual may come to hold a concept of ideal self toward which none of his actions can lead. In such a case the feedback process could not operate effectively and it is predicted that there would be less consistency within the manifest behavior of the individual.*

Another basis for feedback failure can lie in the individual's perception of external reality; plans and aspirations may be built upon the hope (or assumption) that external conditions will subsequently come to favor achievement of the individual's goals. If these hopes or assumptions are not justified, the same sort of feedback problems may be reflected through seemingly purposeless individual behavior.

This aspirational-proceptional transaction can be represented in the same form as the ideal choice discussed earlier in this section. The structure is equally applicable, in that in order to be ideal the proceived transaction must satisfy the criteria derived from full consideration of (1) individual, (2) transactional, and (3) positional characteristics. Thus the proceived activities must be within the capacities of the individual to develop or acquire by that time, the position must continue to meet the requirements that the individual will come to have, and the day-to-day process must be of such a nature that the individual would be willing to undertake it under then current conditions. If any of these criteria were not met, or would not be met, then the proception would not provide an adequate basis against which the individual's feedback system could adjust behavior.

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* This might differentiate between (1) those consistencies resulting from psychopathological factors and (2) those described as purposeful. Thus an extremely neurotic individual may display a type of behavioral consistency which prevents the choice of actions which would be purposeful with regard to the individual's goal. 'Purpose', then, would denote a pattern of achievement rather than merely a pattern. However, the implications of this differentiation are not developed for this essay.

2. The Perceived Transaction:

The "second" transaction in which the individual is involved is that of the self concept and the individual's perception of outer reality. In terms of "pursuing goals," everything that the individual does in the vocational situation is based upon what he thinks he is, and what he thinks is going on around him that is relevant. Consequently a great part of what he decides to do (action-in-situation) will be in response to the transaction of self and situation--as he perceives it.

A review of the literature in the area of phenomenology and self theory would lead to the conclusion that it was only this dimension, of "self as perceived", that could be related directly with manifest behavior. However, it should be clear that the ideal self, proceived in a desired future transaction, plays at least as great a role in the determination of behavior. In fact it is this concept of ideal self-in-situation as goal, achieved through the adjustment of activity by perceived self-in-situation, within the absolute limits set by the characteristics of real self-in-situation, that permits the formation of a theoretical structure of behavior which does not depend upon a metaphysical "agent" or "will."

From the model, it is possible to hypothesize that the individual's immediate behavior will be imperfect in terms of the criteria outlined previously, and also that there will be evidence of consistent distortions in perception which might suggest the sources of distortion, and hence lead to a greater understanding of the developmental process. In addition, it might lead to a more specific location of greater distortion in either the immediate, perceived transaction, or in the aspirational, proceived transaction. In other words, from differences between (1) others' assessments, and (2) the individual's reports regarding his concepts of current and potential "reality," it is possible that a more refined categorization of pathology or maladjustment might result, based upon the concepts of tropism, information, and feedback (Wiener, 1954).

3. The Actual Transaction of Self and Situation:

As suggested in the previous section, there are certain limits placed upon the process of transaction, both by the absolute nature of certain individual capacities and by the reality of environment. Even though a transaction is largely determined by its ongoing nature as a process, there is an interactional level as well. Thus certain characteristics of individual and situation are not going to be altered by the process of individual behavior-in-situation. For all practical purposes, these individual states-properties will remain constant.

In this sense the transaction of real self and real environment is limited to a degree. This limit is set by the interaction of self and situation, i.e., by those sets of individual and/or situational states-properties which are not subject to change by transitional process. Consequently the more accurately an individual perceives self and situation, the more these limits will be reflected in chosen actions.

Once the various conceptual aspects and levels of transaction have been defined the dynamic process of development appears far less complex. In essence, the process is one involving the acquisition and modification of concepts, and their subsequent evaluation and ranking, from which arises an image of an ideal self-in-situation. This image is then used as a basis for comparing the perceived results of individual behavior-in-situation with those results which would lead to the achievement of the ideal self.

The highly individual style manifested by each human being develops from the way his or her "thinking machine" is currently constructed and "programmed" (which determines the results of experiencing), and also upon the input from situation (which determines the maximum amount of information available to experience). From this analogy it can be suggested that characteristics of individual capacity, experience, and evaluation are only one determinant of the developmental process. The same applies to characteristics of the individual's situation, in that it too is only a part of what determines individual behavior-in-situation. Finally, the ongoing process of individual behavior-in-situation can be seen as a functional influence upon both individual and situational characteristics, and therefore upon choice. Behavior is not determined "from inside," then, by an anthropomorphic "ego," or "from outside" as the result of a "stimulus-response" relationship. Each such concept inplies the observation of only one aspect of the total process, and since these aspects cannot be separated operationally it is misleading to separate them in theory.

It is the writer's feeling that the proposed theoretical structure avoids this separation to a greater extent than any other theory readily applicable to vocational investigation. No variable is ruled out, just as no set of variables is presented as containing central causality or "causal primacy." The next chapter illustrates the implications of this approach with regard to the evaluation of current vocational theories.

CHAPTER 5

THE SELF-CONCEPT: A CONSTRUCT IN TRANSITION*

Overview

Like Tiedeman's "retrospect and prospect" chapter with which this section opened, the following chapter which concludes the section provides a summary of recent investigations together with implications for subsequent work.

This concluding chapter focuses in particular upon the substance and implications of the Kehas and Field chapters immediately preceding. It is a very concise statement which resists further abstraction and which needs little introduction. However, we might note at least their statement made in conclusion: "...reasons for choice are more indicative than manifest choice." Again, we hear the note sounded by Field. In subsequent chapters of this collection we shall see further exploration of that statement, with particular regard for the intimate relationship that must exist among reason, reasons, rationality and imaginative, and preconscious, tacit modes of knowing.

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* This chapter is based on a paper by Field, Kehas, and Tiedeman published as "The Self-Concept in Career Development: A Construct in Transition," Personnel and Guidance Journal, 1963, (41), 767-771. [Harvard Studies in Career Development, No. 24.]

Status: Differentiation, Not Consolidation

An accurate report of research in progress at Harvard requires a statement of differentiation. Consolidation, at this point, is impossible because an emerging clarification of basic concepts reveals a significant movement away from such notions as "vocational maturity in adolescence" (Super, Crites, Hummel, Moser, Overstreet, and Warnath, 1957) and "vocational self-concept" (O'Hara, 1958). Consequently, this chapter is directed to the task of differentiating between the established new directions being explored at Harvard, and their bases in the Career Pattern Study, former Harvard Studies in Career Development (Tiedeman and O'Hara, 1963), and other ongoing research. In brief, it has become necessary to redefine what is to be assessed and to free definition from the operational limitations inherent in current techniques. This is a satisfying condition on this eve of the demise of the Harvard Studies in Career Development, and the birth of a Center for Research in Careers at Harvard, under the direction of Dr. Anne Roe and Dr. Tiedeman. Let's stipulate where we are, though, before we attempt to note where we are heading.

Perhaps the most effective means of clarifying our departure involves a step-by-step report of recent developments. In this sense, then, the new branch began in 1957 with O'Hara's unpublished paper on the importance of the self-concept to a general theory of occupational choice (O'Hara, 1957). The several subsidiary studies which O'Hara has since completed (O'Hara, 1959, 1962 a & b; O'Hara and Tiedeman, 1959), provided a firmer empirical basis for the central position recently ascribed to self-concept in the study of vocational development--seemingly quite in accord with statements by Super and some of his colleagues (Super, 1953; Super _et al_, 1957; Super and Overstreet, 1960; Super, Jordaan, Matlin, and Starishevsky, 1963). But this accord did not extend to include a common definition of the self-concept. As it became feasible to reconsider it operationally, self-concept began to appear not only more central, but also far more variable and complex.

A further step in our progress came from assimilation of Tyler's contribution to theory and method for assessing vocationally relevant conceptions of self (1959, 1961). An effective framework for research must include a changing, developing _complex_ of conceptions of self, all of them susceptible to the influence of situation.

The power of situation to shape conceptions to self, and _through such concepts_ to affect aspiration or choice, was suggested by Herriott's research (1961). Currently, it is being well established by Shea (1965) who is continuing the work of the late Professor Samuel Stouffer. It is evident, for example, that children from deprived backgrounds frequently do not experience any reason to _think of themselves_ in connection with higher education, which is one reason why they rarely plan for it--or even accept it when offered.

To repeat, as a result of these investigations self-concept was assured the central place that Super (1953) predicted it would take. The _fact_ of its appearance, however, has tended to blur some essential differences in how it is defined and used by various researchers. Recent work (Kehas, Chapter 3) has led to an extensive redefinition of theory and has served to highlight these differences. This position will be considered in the next section, to be followed by a consideration of conceptions of self in vocational situation and of some resulting operational implications (Field, 1961 and Chapter 4).

Conceptions of Self and Self-Concept

A person is capable of reflecting upon himself experiencing and framing judgments about that experience. These judgments are ordinarily of the semantic form, "I am---." For instance, "I am bright enough to go to college" is a conception of self which many educators want to promote among youth in secondary school, whenever the conception is warranted. We are interested in conceptions of self because they ordinarily serve as partial bases for choosing or planning behavior, although, of course, they need not do so. The conception of self as bright, for instance, can be of neutral force. Hence the task is to discover those concepts relevant to whatever behavioral events are under study.

Man can view his life as a process as well as experience himself as an object. This distinction, although subtle, is critical for delineation of self-concept. A person who construes life as a process can see that his behavior is part of a continuous unbroken flow of experience which he can never fully comprehend. Appreciation, however, may be deepened upon reflection, analysis, and integration. Exercise of these processes enhances a person's comprehension of his position in the world and thereby increases the potential control he can have over his own circumstances.

5.5

In seeing life as process, a person may come to believe that conceptions of self are just that, conceptions, that is, categorizations of experience which are valuable in ordering experience and anticipating the future. Realizing this, a person can view not only life as process but *self as process*, so that the focus changes from one of self-concept to the *process of self-conceptualizing*.

Many issues abound in defining self-concept as the systematizing of self emerging from an experiencing of self as process. Here, we can only point to the issues and suggest further scrutiny.

The first issue surrounds the data and their observation. Is the self-report equivalent to the self-concept? The relationship of these two constructs lies at the basis of an old and unsolved problem: what is the place of introspection in scientific investigation? This question must be clearly and openly confronted.

A second issue concerns the inferences made from these observed data, *e.g.*, the meaning of the arrangement of conceptions of self as obtained in a Q-sort. Mere ordering, without inquiring into the bases for ordering, is only a first step; necessary, but hardly sufficient. There are at least two questions inherent in this second issue: (1) What is the relationship of the comparison of self sorts (what are you like) with ideal sorts (what do you want to be like) to the nature of goals and motivation? (2) Do discrepancies in the sorts describing, for example, how a person thinks significant others might like him to be, logically reflect all the contingencies needed for adequate understanding of the premises of a person's self-system viewed as self as process?

A third issue involved in defining self-concept as the system of self evolving from the experiencing of self as process has to do with both (1) the degree to which a person is, or may become, aware of the process, and (2) the treatment of what psychoanalytic conceptions have called unconscious motivation. Specifically, the relationship in question involves the processes of self-conceptualizing and consciousness or awareness. The difference between psychoanalysis and self-psychology is not in the denial by proponents of the several self-psychologies of the experience conceptualized as unconscious motivation in psychoanalysis. The difference is rather in _the conceptualization of that experience into different primitives_ in the self psychologies. Hence one _must_ look to the primitives of a man's theory in comparing that theory with other theories. Evidently this has not been done too thoroughly in reviews of self-psychologies. Wylie's (1961) recent review of research is particularly aggravating in this regard. Wylie was intentionally atheoretical. There is therefore little wonder that her review, which was organized around measurement and research design problems, found so little in self-psychology. She just did not have pertinent principles for organizing the research.

To and from these roots, namely, "experiencing self-as-process" and "the process of self-conceptualizing," a theory has been added which is centered around "concepts of self-in-_vocational_-situation." The work of Field (Chapter 4) on this subject essentially offers an operational vocational aspect to the theoretical approach proposed by Kehas (Chapter 3). We turn to the implications of that theory at this time.

Self in Vocational Situation; Some Operational Implications

Field's theory takes the form of a structural representation of vocational development within which relevant aspects of individual experience are specified, namely those which affect choice by determining the bases for choosing. Following Kehas, the theory suggests that individuals choose actions which fit their current notions of: (1) what they are like; (2) what they can be like; (3) what they want to be like; (4) what their situation is like; (5) what their situation might become; and finally, (6) the way they see these aspects of self and situation as being related.

Consequently, it is held that choice is affected by the ways in which the individual arrives at such conceptions of self-in-situation, by his experiencing style in other words. This style can be said to determine or limit the experiencing process, and therefore the conceptual results of experiencing as well. To the extent that choice is based upon these concepts of self and "out there," such styles become the bases for action choices, i.e., of vocational aspirations, of plans for implementation, or entry into a position, and of development in and/or beyond entry position (career).

There is in the above theory close resemblance to Super, and still closer similarity to Starishevsky and Matlin (In Super, et al, 1963). But again there are key differences, in that the bases for choosing may be of great variety and complexity, never fully fixed into rigid combinations, and highly subject to situational influence. Although idiosyncratic, individual behavior is not immune to new and different experiences or situations. People change. Hence "translation of the self-concept into vocational terms" does not happen once and for all, or even every now and again; it too is a developmental process. It is not an incorporation of "a dictionary," or of fixed self-knowledge, but rather the on-going revision by experience, of experiencing styles, and the conceptual results of experiencing (choice bases). Hence individual idiosyncracy is broad. It remains possible for a person consistently to "be himself" while at the same time fluctuating among seemingly diverse patterns of behavior, choice, or aspiration, because maturational and/or situational changes will help determine these patterns by affecting the choosing styles.

There are several operational implications within this theoretical orientation toward an idiosyncratic but variable development process. Perhaps the most important and illustrative of these is the implication that reasons for choice are more indicative than manifest choice, that assessment of experiencing style is a better basis for predicting or counseling than assessment of the conceptual results of experiencing. Self-reports, Q-sort arrangements, and/or test protocols do not lead directly to an understanding of the nature of future choices. Instead, they suggest the bases upon which future choices will be made. Thus prediction need no longer depend upon the continuation of the individual's situation, because it can incorporate situational variables --suggesting what limited situational aspects the individual is likely to experience--and hence the bases upon which he will choose. This is the likely direction of our coming efforts to assess self in vocational situation.

SECTION II: "STOCK-TAKING"

Overview

The chapters which comprise the first section of this book place the College Board monograph of Tiedeman and O'Hara in its developmental context. They exemplify prior developments in theory and practice within the context of the Harvard Studies in Career Development from which the Tiedeman-O'Hara monograph emerged. They provide, thus, the basis for considering in this section the conceptual issues which have emerged since and which, in turn, set the stage of dialogue for the "new directions" in current projects to be presented in the next section.

The chapters of this section represent work from the period 1963-1965. This was a period of general stock-taking, a period in which recapitulation of recent thinking produced something of a "watershed" perspective regarding psycho-social contexts and processes of personal choice behavior. The chapters included here, thus, serve first of all to summarize and clarify the issues in conceptualization and investigative strategies that became the focus of work following the Tiedeman-O'Hara monograph. In addition, they provide a perspective regarding those issues which directly anticipates the new directions for exploration outlined in the next chapter.

CHAPTER 6

FROM SELF-CONCEPT TO PERSONAL DETERMINATION IN CAREER DEVELOPMENT*

Overview

The summer of 1963 brought to a conclusion one period of collaboration between Tiedeman and Robert O'Hara and Frank Field. With O'Hara, Tiedeman had presented a statement of the concept of career in personality, emphasizing the form that career takes in the development of personal identity (Tiedeman and O'Hara, 1963). With Field, he had presented a statement of the concept of purposeful action and of the possibility of using the cultivation of purpose, particularly the purpose achievable through vocational development, as a goal with which to unify the diversity of personnel services offered to students throughout their education (Tiedeman and Field, 1962).

During the academic year 1963-1964 while on sabbatical leave at the Center for Advanced Study in the Behavioral Sciences, Palo Alto, Tiedeman had occasion to reflect on purposeful action in relation to his understanding of the then current statements of Super (Super, Starishevsky, Matlin, and Jordaan, 1963) regarding self-concept in vocational development. As a result of these reflections, a relationship between Tiedeman's concept of career and Super's concept of vocation was worked out. At the same time, Tiedeman began to view the concept of purposeful action as providing a means for stipulating the further possibilities available for the cultivation of personal determination in career. In brief, Tiedeman realized that, if he studied careers only as they had occurred, his studies, while they might be consistent with current notions of "behavioral research", would not be fully "purposeful" in relation to either his own career or the implications of his theory. If, on the other hand, he studied careers as they were in the process of becoming, his research could lead to the potential improvement of Guidance-in-education, and a perspective regarding rationale and strategy in studies of human behavior more consistent with our implicit concerns for freedom in human action. Tiedeman realized, however, that action guided by the implications of this new perspective would require him to make more explicit an understanding of (1) the conduct of inquiry and the nature of evidence and inference in the study of human action and (2) the theoretical implications of the concept of personal determination in career development. These two lines of writing were developed during 1963-1964.

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*This chapter is based on a part of a paper by David V. Tiedeman circulated under title of "The Organization and Intention of a Proposed Data and Educational System for Vocational Decision-Making (Harvard Studies in Career Development Number 42).

Tiedeman is indebted both to Mrs. Eileen Morley, Research Assistant, Center for Research in Careers, for criticism and revision of an earlier draft of this chapter and to Professor Warren D. Gribbons, Regis College, for a 1965 summer seminar on an Information System for Vocational Decisions.

In the first chapter of this section Tiedeman focuses on the "science" problem and provides in the course of his discussion a detailed review of the development of this problem as a bridging consideration between Super's work at Columbia and his own at Harvard. In brief, Tiedeman's solution to the "science" problem requires belief that the concept of the personally-determined career can be free of several present restraints on the meaning of "behavioral science". In his view the current behavioral sciences represent propositions about persons' behavior, propositions, that is, framed without the person's prior knowledge or present participation vis-a-vis the "variables" crucial to the scientists' prediction of behavior. The science of personal determination, on the other hand, while it still requires the framing and testing of propositions about persons' behavior, frames such science-like propositions on the presumption that the person has had prior opportunity to learn about and to participate in the dimensions of his behavior which render it predictable.

The implication of this position is that the behavioral sciences must become information within a context of purposeful action. Such a paradigm permits analysis of the person using the resources of the behavioral sciences as data appropriate to his own purposes. Purposeful action, thus, becomes explicated as the evolution of (1) goals from the experience of using such data and (2) the revision and reformulation of goals from the experience of acting upon goal-directed sequences guided by that information.

These are the issues Tiedeman deals with in this first chapter devoted to the "science" problem. In the second chapter of this section, namely Chapter 7, he turns to a more explicit consideration of the "theory" problem.

Self-Concept and Personal Determination in Career Development

During 1962-1963, Donald Super joined Henry Borow, Jean Jordaan, Robert O'Hara, Ted Volsky, and Tiedeman in preparing a set of monographs under commission from the College Entrance Examination Board. In the course of discussions in what turned into a seminar, Tiedeman became fascinated by the possibility of delineating personal determination of career within Super's concept of vocational development. That possibility has directed his thought since publication of his monograph with O'Hara (Tiedeman and O'Hara, 1963). Tiedeman attempts to draw these threads together here because they underlie his proposal for the Information System for Vocational Decisions (to be presented in Section III). The Information System constitutes the present phase of Tiedeman's effort to provide a system of thought within which it is possible to comprehend somewhat more, the theory, processes and data of self-determination in career development.

Super's 1963 Statement of Self-Concept Theory. Professor Super assumed responsibility during our College Board seminar for drawing together research on self-concept and for reformulating his theory on the self-concept in vocational development. The results of that work appear in the monograph Career Development: Self-Concept Theory (Super, Starishevsky, Matlin, and Jordaan, 1963).

As indicated more fully in Chapter 4, Super's discussions and essays growing from the seminar took three essential directions:

1. the placing of self-concepts into a theory of vocational development;

2. the provision of more operational statements of the development of self-concepts; and
3. the specification of the tasks of vocational development encountered in adolescence and young adulthood.

In addition, Super supervised the preparation by Reuben Starishevsky and Norman Matlin of an essay on the translation of self-concepts into vocational terms. Super also stimulated his colleague, Jean Pierre Jordaan, to provide an essay on exploratory behavior. In this essay Jordaan was interested in the origination of self and occupational concepts.

Robert O'Hara and Tiedeman met regularly with Super and his group in the process of framing their essays as noted. O'Hara and Tiedeman were engaged in:

1) expanding their understanding of a chosen alternative into an understanding of a process of choosing; and
2) relating the development of the process of choosing in vocational life to Erikson's (1959) psycho-social process of identity formulation.

In reflecting, under criticism, upon the ideas of Jordaan and Super and those of O'Hara and Tiedeman it came clear to Tiedeman that Super was engaged in advancing his thought by:

1. expanding Wylie's (1961) review of self-concept theory by incorporating vocational choice as an additional means of self differentiation, an omission in Wylie's thought;
2. incorporating self-concepts [note the plural form in light of Kehas' statement (Chapter 3)] as a primary term of self

differentiation in contrast to his previous emphasis on self-concept alone;

3. construing the union of self and vocation essentially as a translation; and

4. attributing motivation for the translation in 3) largely to external events known as "tasks of vocational development."

In contrast, Erikson (1959) analyzes the development of ego-identity in relation to modification in awareness of one's psycho-social position. Erikson's concept of "position" is at once social ("what they want me to be," so to speak) and personal (something in the individual's core). Thus, the ego development which Erikson sketches involves the incorporation of social roles into the ego through the mechanisms of the self, among other mechanisms. However, Erikson's ego development also involves the effect on social roles of psychological development should personal responsibility become operative.

O'Hara and Tiedeman attempted to bring Erikson's conception of ego-development into Super's conception of self-concept in vocational development. Their principal mechanism for the attempted union was the logic of decision-making (see Section I). Decision-making was proposed as central in the more comprehensive mechanisms of differentiation and integration. Finally, decisions of vocational development were particularly construed as prime opportunity for the differentiation and integration of ego identity. Such differentiation and integration in turn develops the potential of decision in personal development.

Tiedeman and O'Hara's effort to place decision in the center of the development of identity through vocation brought Tiedeman to realization that he must then analyze the process of career development in terms of the potential growth in awareness of one's responsibility for vocational behavior. His habits as a former statistician made this realization difficult. Experiments in psychology do not ordinarily involve the subject as an agent in processing the seeming data from the experiment. Thought as a mechanism in behavior is therefore usually unanalyzed in psychology particularly in relation to the effect under specific investigation. Professor Super's thought during 1962-1963 was also bound by this restriction (see Field in Chapter 4). This is why he, with Starishevsky and Matlin, attempted to invoke the formal concept of "translation" in seeking to operationalize the union of self and vocation. Furthermore, this is why "developmental tasks" becomes a prime term in his system of vocational development because initiation of development is kept external in the bahavioral mode of analysis. Crites (1964) accepts similar limitation on his conception of vocational maturity.

Beginning with the College Board seminar, Tiedeman has given serious consideration to the possibility that we can make science-like propositions about the actions of people when the data on which we base those science-like propositions are also provided for the person to whom we believe they apply. Tiedeman thereby focused his interest on the process of knowing as has Bruner (1962).

The Ideal in the Self-Concept. Prior to the College Board seminar Tiedeman preferred to construe vocational behavior as primarily stemming from conceptions of self. In maintaining this preference, he frequently exasperated his collaborator, Robert O'Hara. However, his interest did lead him under O'Hara's guidance to comprehend the potential effect of personal impression upon a pattern of action.

The College Board seminar with its concomitant responsibility for an essay with O'Hara caused Tiedeman to realize that he was avoiding consideration of a primary question in vocational development, namely, what is the origin of conceptions of self (see Field in Chapter 4), the question which Roe and Siegelman (1964) ask in terms of the origin of interests. O'Hara and Chris Kehas, then a student at Harvard, brought the conception of "idealness" into Tiedeman's attention and the conception of "idealness" in turn became a bridge to his giving reponsibility for personal determination a central position in his thought about career development.

Kehas first developed a critical review of the self-concept (Chapter 3). His review notes the streams of research which have on the one hand dealt with stated conceptions of self and on the other hand with discrepancies between these conceptions and those which are considered to be ideal. It is the presumed need for consistency in actual and ideal conceptions of self which has directed the therapeutic interest in the self-concept. It is conceptions of self which have influenced vocational study of self-concept because of the need in vocational choice theory to attribute direction to interest and assessment of personal circumstance. Kehas clearly distinguished these two uses of self-concept in his dissertation (1964) and successfully used the distinction in relating both self-concept and conceptions of self to school achievement relative to expected level of attainment.

Purposeful Action and Career Development. Kehas joined Field and Tiedeman (Chapter 5) in proposing the incorporation of the concept of idealness into the problem of explaining the emergence of vocation in the self-concept. The idealness concept provides a primary term within which it is then logically possible to construe the potential for direction in vocational behavior. However, the concept of idealness in turn offers two difficulties in theory, namely:

1) the source of the ideal may be construed as only external to the person and hence lead to illogical and sometimes even inflammatory considerations of both presence and time; and
2) the ideal logically bears no necessary connection with actual events because the person must himself forge a connection if the ideal is to guide action.

Kehas, Field, and Tiedeman are in accord as to the advantage which incorporation of the concept of idealness holds for development of theory in career development. Kehas elected to study the conception itself in his dissertation. Field elected to make further analyses of the problems of presence and connection in his dissertation. Field's thought gave rise to his concept of purposeful action (Field, Chapter 4 and 1964). In purposeful action, existence of a desired future state and of an awareness of a present state are both postulated. Furthermore, knowledge of a discrepancy between the desired and actual states is presumed to exist. Under such conditions it then becomes possible:

1) to think of ends and means;
2) to derive goals;
3) to plan;
4) to undertake activity under guidance of the plan which is designed to reduce the known discrepancy; and

5) to experiment with the use of means under guidance of plan until the end is accomplished or until realization begins to appear that ends and the whole structure of purpose must be shifted.

Purposing through Education. Purposeful action in no sense either determines completely from the outside the advisability of pursuing one end or another or guarantees the achievement of a desired end. Field deliberately defines purposeful action so that goal determination and risk are left as matters of both individual choice and intelligence. It has been for these reasons that Tiedeman has given very serious consideration to using purposeful action as the goal of Guidance as organized within an educational frame (Tiedeman and Field, 1962; Tiedeman, 1964). Purposeful action permits the guidance practitioner to focus directly upon two professional problems, namely:

1) the exercise of individual choice; and

2) the exercise of intelligence in action.

Obviously Tiedeman uses the term "intelligence" in a wider sense from scholastic aptitude test scores. In fact Tiedeman intends the term to connote the exercise of thought and judgement in bringing act and intention into relation so that accomplishments of credibility (as judged by others) are achieved.

The concept of purposeful action is by definition a static concept. It is analyzed in relation to a single choice situation. Concepts of plan and feedback within the general conception are themselves fluid or processional. However, the primary term is only understood in terms of a specific choice. Field and Tiedeman came to realization of this inherent limitation of their original proposition (Tiedeman and Field, 1962). Tiedeman himself attempted to subsume this limit into a larger conception of more general power. Tiedeman does so by thinking of purposeful action as being but a paradigm applicable in many circumstances. That overarching paradigm essentially places the sub-paradigm of purposeful action into the frame of time. Purposing, not purposes, then becomes the essential conception (Tiedeman, 1964).

Tiedeman elects to conceive "purposing" in relation to an educational frame. He does so because that is where he believes that Guidance should be practiced. Tiedeman does not limit meaning of "educational frame" to schools and colleges. However, he does limit meaning of the term to an institutionalized form of encouraging persons to become thoughtful about their action. By this means he seeks societal sanction for the ethic he urges upon those he serves. Furthermore, he accepts limit on his pursuit of that ethic. If society does not support him, he is with idea but without power.

The conception of "purposing" permits Tiedeman to imagine opportunities throughout the school day and life in which invocation of the paradigm of purposeful action is possible. In relation to such possibilities the processes of purposeful action can be seen as potentially available to adult and student attention rather frequently. Furthermore, there is no reason for vocation to be the sole context in which such processes are brought into attention. Decisions of relationship in family, neighborhood, recreation, school subjects and life plans are all analyzable in the terms of this single conception. However, by attending to the process of, and skill in, deriving purpose throughout educational activity, it becomes possible to conceive of a developed sense of having purposed and of being responsible for what is happening to one. It is not that Tiedeman wants people to have purposes continuously. He merely wants people:

1) to be capable because of education of having purpose when desired; and

2) to recognize that the analysis of personal activity in relation to the paradigm of purposeful action provides each of us with powerful means of understanding ourselves.

Tiedeman cares not, except as an educator, that people are rational. However, he does care as a Guidance practitioner in education that each person come to recognize as best he then can that irrationality can only be conceived in relation with rationality. It is not possible to be irrational unless one has a conception of rationality with which action is being compared. This is the goal he seeks by purposing as a Guidance practitioner through education (see Section V).

The Possibility for Science in Purposing Through Education

We have so far indicated that Tiedeman's primary attention in understanding career development is presently given to incorporating the personal conception of idealness within the vocational self-concept, through application of the paradigm of purposeful action, with sufficient repetitiveness that mastery of the process of acting purposefully is achieved. This triplicity may be re-stated in the form of goals, thus:

1) the incorporation of the personal conception of idealness

within the vocational self-concept;

2) the use of the paradigm of purposeful action as a process model; and

3) the achievement of mastery over the process of acting purposefully, through repetitive practice.

Tiedeman is also interested that vocational activity be a form of expression of purposeful action. Prior to the above excursion Tiedeman had proposed that it is possible to frame science-like propositions with regard to the incorporation of facts/data by persons sharing many of the facts/data which behavioral scientists ordinarily exclude from consideration of their subjects. We return here to that assertion.

Field and Tiedeman recently wrote of "Measurement for Guidance" (Tiedeman and Field, 1965). The preposition "for" is very deliberately placed in their title. They wrote a statement which:

1) presents the ordinary paradigm of prediction through traits/factors (Tiedeman, 1956);

2) proposes that mastery of that paradigm be a responsibility, not of the scientist alone, but also of the person attempting to give direction to his life; and

3) explores the possibility of making science-like propositions about the process of incorporation which the person would use in turning the historical-type statements of behavioral science into information for himself in relation to growing knowledge of his intentional framework.

It is their belief that, if the scientist remains explicit about 1) and

2) above, he can accumulate records of the history of 3). These records can in turn provide data about which the scientist can then attempt to formulate explicit and reproducible statements about the phenomenon of a person involved in the incorporation of a process by which he can evolve and use a feeling of mastery over his vocational destinies.

CHAPTER 7

OCCUPATIONAL PSYCHOLOGY AND GUIDANCE IN EDUCATION: FOUNDATIONS FOR A LANGUAGE OF CAREER DEVELOPMENT*

Overview

In this chapter, Tiedeman proposes foundations for a language of career development consistent with his point of view regarding the second or "theory" problem that emerged during this period of "stock-taking." In this paper he first delineates the incipient concept of a personally-determined career in the history of investigation of vocational development. He then outlines the value of the conception in relation to goal and program in guidance-in-education.

Tiedeman introduces his discussion with a phenomenological context provided by the case of "Paul." He then reviews the development of studies in the field of occupational psychology, indicating salient themes and strategies of differential relationship among the various major investigators. Next he outlines a "language" of career development in occupational psychology, bringing to a preliminary integration the two major paradigms of earlier collaboration (1) differentiation-integration (with O'Hara) and (2) purposeful action (with Field). In conclusion, he considers the cultivation of a will to purposeful action, in education and through the processes of vocational maturity.

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*This chapter is part of the chapter "Occupational Psychology and Guidance in Education" by David V. Tiedeman (Tiedeman, 1965). It is also the expanded version of "The Cultivation of Career in Vocational Development Through Guidance-in-Education" (Tiedeman, 1965).

A Preliminary Glimpse of Career

From Occupation to Career. The study of occupational psychology in the United States has traditionally emphasized both the demands for work which an employer makes upon an employee and the assessment of whether an applicant for work is likely to fulfill demands or not. Other well studied topics in occupational psychology include 1) conditions of work, 2) opportunity for work, and 3) people's interests in work activities of various kinds. However, occupational psychology presently focuses upon the choices which are inherent in vocational activity. Choice occurs among collections of people, each of whom fulfills intentions through his work. The choices a person makes as he pursues his intentions at work determine his career.

The concept of "career" has two meanings. In one sense, "career" is a sequence of opportunities arranged *for* an employee with the intention of providing him responsibility of an increasingly delicate nature. In another sense, "career" is the development of cognitive structures by a person which allows him to engage in the exercise of initiative at work with a feeling of fulfilling his desires.

The concept of career in occupational psychology is not far developed even in the first or other-determined sense I have indicated. Nevertheless I shall attempt to state the case for the concept of career in the more complex second, or personally-determined, sense. I do so because the more complex case embraces the simpler, other-determined career and because personal determination of career constitutes the frontier in the theory of career development at the present time.

I shall consider the concept of the personally-determined career in three ways. First I present a case which might quicken your intuitions by causing you to reflect on other careers including your own. Second, I review the ways we have studied vocational behavior both to raise several key issues in the study of career development and to offer you a sense of modification in the subject of occupational psychology. Third, I offer a linguistic frame for career development. Since I can only stipulate structures in careers and necessary dependencies among structures, I refer to my propositions about careers as a "language." The language offers opportunity for consideration of the cultivation of purposeful action through choosing, particularly the choosing associated with personally-determined careers.

The Case of Paul (grade nine, bright). (Taken from Tiedeman and O'Hara, 1963, pp. 14-21). Cues to the personally-determined career reside in the presentation of ourselves at work as we converse with others. The research interview about home, work and vocational choice offers some access to such cues. The case of Paul illustrates the point. The analysis of the case portrays the career which O'Hara and I found in the case. You can gain some sense of career from the interview and its analysis. Reflect on your own career as you read of Paul's.

Paul's father is a lawyer; uncle designed guided missiles for the Air Force.

I.1:* Well, we'd like to have you answer a few questions about educational plans and vocational plans, what you might like to do when you get older. You have any idea what you might like to do when you get older?

S.1:* Probably something connected with science.

---

*"I" stands for interviewer; "S" for subject, namely Paul.

I.2: Really.

S.2: Yes. Ah, biology or go to engineering school or something like that.

I.3: Uh hum.

S.3: Or go into the Air Force and do some science work there. Or even be a doctor. That's the last resort, probably. But science is probably what I'm going into. Both my uncles are scientists, my father is a lawyer, but I'm not interested in that.

I.4: You're not interested in the law, huh.

S.4: No. (laughter)

I.5: Both your uncles are scientists, huh?

S.5: Yes. Ed.D. and all that sort of stuff.

I.6: Well, for goodness sake. Where do they teach?

S.6: One of my uncles works at GE Lab. Works on the microwave. The other works as a specialist. He's some big engineer. I don't know. The one that works at GE Lab, works on cases and all that sort of thing. He and I get along pretty well together when we converse on the subject. I guess that's about it.

I.7: I see.

S.7: Oh. Yes. I forgot about another uncle. My father's, I mean my mother's sister's husband works at Raytheon.

I.8: Here in New Jersey?

S.8: No. He used to work in Chicago then he went down to Pennsylvania and then he was in the Midwest for quite a while and then he got transferred back to Pennsylvania.

I.9: Uh hum.

S.9: Probably because he got a promotion, then he went back to Pennsylvania. (laughter)

I.10: Have you done anything about this thing? Are you taking science courses?

S.10: No. I was in science right now. (laughter)

I.11: Oh! Were you? I've taken you away. (laughter) Well, okay.

S.11: Would this be out of line to ask what I'm up here for?

I.12: Just to discuss this kind of thing with you. We're interested in the development of a career for someone.

S.12: Oh. Do you do this with everyone?

I.13: No. I'm doing it to just a few people in the school and maybe in the fall I'll do a few more. What we're trying to get at is the ideas about what you would like to do and how these ideas got started. Did these ideas mainly get started from your -- (cut off by student).

S.13: No. Not exactly. It's just that I've always liked science and I seem to get along pretty well in it.

I.14: Uh hum. Do you do well in school?

S.14: Ah -- it's very funny. I had a rotten teacher this year in school, Miss Campbell. You know Mr. Porter.

I.15: No. I'm afraid I don't.

S.15: Well, he's quite famous and I wish I'd gotten him. He, ah, he's a fabulous scientist.

I.16: Uh hum. But you do enjoy working in science.

S.16: Yes.

I.17: How about math?

S.17: Oh. Yes, I enjoy that, too. That's what next year in ninth-grade mostly science and math are the subjects with the exception of English required.

I.18: What sort of marks did you get this year?

S.18: A's and B's. I get very funny averages in science but it averages out to a B this year. Last year I got an A average.

I.19: Uh huh.

S.19: And in math last year I got a B. This year I got an assortment of A's and B's. It came out to be a B, though.

I.20: (laughter) You like to get good marks, huh?

S.20: Mmmmmmmmmmm.

I.21: Do your folks encourage you to get good marks and work hard?

S.21: They do! I'll never go home with a D. If I do I'll never get out of the house alive.

I.22: (laughter) And they would like you to go to college, would they?

S.22: Yeah. If we can afford it.

I.23: It's a pretty tough proposition. It takes a lot of money.

S.23: About $1,500 a year.

I.24: Your dad is a lawyer. Where did he go to school?

S.24: Columbia Law School.

I.25: Uh huh. College?

S.25: Yes.

I.26: I mean Columbia College, too?

S.26: Ah, I don't know much about that, he went to Columbia Law School and I think he went to college.

I.27: How about your mother?

S.27: She went to Columbia. That's where they met, at Columbia. And they both came from St. Louis and didn't know each other though, quite a coincidence when they got to New York. (laughter) She was going to Graduate School or something like that, and (pause)

I.28: What did she study?

S.28: She went to Graduate School, but I don't know what for. She taught art. She's an art teacher. (pause) Then she got stuck with me. (laughter)

I.29: Okay. What does your mother think of your idea of scientists?

S.29: I don't know. I honestly don't know. I suppose she thinks that's what I'm going to be.

I.30: How about your father? Have you ever talked to him about it?

S.30: No.

I.31: How about your uncle?

S.31: Well he and I don't discuss what I'm going to be, we just discuss science.

I.32: Just talk about science, huh?

S.32: Yeah, we talk about radios and that sort of stuff.

I.33: Uh hum. What business does your father work for. What company?

S.33: First National Bank.

I.34: As what?

S.34: Assistant in payroll department.

I.35: All right.

S.35: That isn't terribly high, by the way. (laughter)

I.36: Well that's all right. Sounds like a good job to me. Ah, what sort of things do you like to do, ah -- (pause)

S.36: Well, I like to read. And then listen to records, you know, Broadway and classical and then, ah, I like planes a lot and I spend a lot of time with them, taking pictures and so on. And then photography and then I fuss around with trains.

I.37: Oh, do you? Is that so? All these things are related to scientific projects.

S.37: Mmmm. Yes. I never looked at it that way.

I.38: Well they can have -- (cut off)

S.38: Yeah. Well, if you get into hi-fi, well you're really getting into science.

I.39: Yes. And you have to have all kinds of engineering knowledge to construct and build trains and the same is true for airplanes, too, huh?

S.39: No. All seniors going into scientific work in airplanes go into the Air Force, take nuclear physics and get a plane that will fly with atomic energy.

I.40: Uh hum. Did you go over to the airport there a week or two ago when they had -- (cut off)

S.40: Oh. Yeah. And I blew a beautiful picture, you know, I enlarged them, of the Thunderbird, that came out pretty well and also pictures of the B-47.

I.41: Good. Do you have your own darkroom in the cellar?

S.41: I have two closets and one is a huge one so I converted that. They're pretty complete. And then I've got two pretty good cameras. I had a full-length camera for about a year and then I, around a week or two ago, got a Argus 21.

I.42: How about going into photography. Would you like that work?

S.42: Well, I don't know.

I.43: You never thought of it?

S.43: I thought of it but it's sort of ah, not too bad an idea.

I.44: You would just prefer to keep it as a hobby right now, huh?

S.44: Hum? Oh, yeah. I like to use it for my own.

I.45: How about talking this over with someone. Have you ever talked it over with anyone? With your guidance counselor or someone like that.

S.45: Oh. Do you know Mr. Murphy, well we were talking it over and they were giving this IQ test that they have and I got average marks in English and that sort of stuff and he said I did very well in science.

I.46: Well, and that kind of convinced you that you were on the right track, huh?

S.46: I wasn't thinking about it at the time so I didn't care, but it's a good idea and it's good that I did pretty well on it.

I.47: What other things do you like to do, Paul?

S.47: It's rather hard to say, ahaaa, well you know. I do all the things -- I'm running out of things, (pause) well, I read all the time.

I.48: Tell me what you read.

S.48: I read a lot of aviation stories. I've got Tales of the South Pacific. I haven't read it yet. I've heard the record many times. I have it, but I just borrowed it today and I read some scientific books and a lot of airplane books and adventure books.

I.49: What kind of adventure books?

S.49: Oh! I read Time magazine and other magazines like that and then (cut off)

I.50: Life?

S.50: Life is good but we don't get it so I don't get to look at it often, but when I see one I usually look at it. Time has a very good scientific articles.

I.51: Uh mmm.

S.51: And then the New Yorker. I like the cartoons.

I.52: Is there anything you dislike doing?

S.52: Also I read The New York Times, that has good articles on science. They had a whole article on rockets a week or two ago.

I.53: I saw that, yeah.

S.53: That was a wonderful article.

I.54: Okay. So what are the sort of things you dislike doing?

S.54: Oh. That is, well, mowing the lawns and that sort of thing. (laughter)

I.55: (laughter)

S.55: However, I get money out of the lawns I do for the neighbors. I got five bucks last Sunday and I spent it all. (laughter) I spent it on film and I paid back my mother. Something I owed her. I have a cash balance of 30 cents now. (laughter)

I.56: (laughter) Do you keep a budget?

S.56: I try to keep the money, but there are certain spendings that I do do. We've got money in the bank and I try to keep it there. But, I don't know what I dislike to do. Oh! The piano, I dislike that.

I.57: So, this interest in science is pretty general, I gather.

S.57: I got a lot of general -- (cut off)

I.58: Yeah, well, you have a specific interest in airplanes, is that it?

S.58: Quite a bit.

I.59: An aeronautical engineer, huh?

S.59: That may be so. I'd like to fly, but that's impossible.

I.60: Oh. Couldn't you?

S.60: Yeah, I suppose, with glasses. I suppose I could get in if I were to ditch the glasses but that's sort of hard to do.

I.61: Yeah, I guess you couldn't do that.

S.61: I could probably buy my own plane. A cool six thousand.

I.62: (laughter)

S.62: No. You can get a piper cub for five but those aren't any good. Get a nice one, a second hand DV -- (unclear). As I remember after World War II, you could get to buy a plane for five bucks or so.

I.63: Well, okay. Are there any other things you'd like to mention about your future plans?

S.63: I don't know. After college, I'll just settle down and work, I hope.

1) Structure of the interview. Paul largely revealed himself in terms of his interests; there is reference to vocation though.

2) Vocational choice. Paul is spending a summer at school (in an enrichment-type program) prior to entering grade nine next September. He, too, appears to be in the stage of clarification with regard to his vocational choice, ". . . something connected with science" (S.1), particularly biology, engineering, or medicine, presently a probable last resort (S.3). Paul's interest in engineering is pretty well supported by identification with an uncle, possibly a physicist, who discusses science with him (S.31).

Paul's work in school is consistent with his present preference for science (engineering). He embarks upon a step of induction this summer as he pursues a course in science (S.10). He will begin the pursuit of mathematics and science in September in grade nine (S.17). He has done well in mathematics and science in earlier grades (I.18-S.21). Paul hints at a sense of competence in science (S.13 and S.46). His vocational choice suggests the attitude, "I am what I do!" Trains, planes, and particularly photography are well developed interests (I.36-S.41). Paul was first struck by, but then appeared doubtful of the interviewer's suggestion (I.37) that these interests supported his choice of science as they seem to do.

Paul indicates some awareness of the pattern of discontinuities that stand before him, college (I.22-S.23) and then work (S.63). He indicates awareness of what college will cost (S.23) but has some trouble distinguishing between college and graduate school (S.26-S.27). Work is still relatively undifferentiated except for some definition of his father's position (S.35) and some negative feeling toward lawn mowing which had been a means of earning money (S.54-S.55).

Paul's choice of a career in science (engineer, aeronautical), has been said to be in a condition of clarification.

Again we must emphasize the tentative nature of the clarification. Although Paul is on the threshold of induction with regard to study for realization of his choice, about eight years remain before he might enter scientific work. We expect a rather significant growth toward vocational maturity in that time.

The interview provides little or no indication that Paul has explored very much. He was surprised by the suggestion that his choice of career and his hobbies were related. There is no indication that goals have been placed in relation one to another in order that the resulting psychological fields could be ordered in some way. In fact, there is the suggestion that Paul has repudiated his father and his career (S.3-S.35) and has turned to the work of a favored uncle. Paul hasn't learned much about himself in the process. Yet his life situation is pretty well defined for him (S.21-S.22). Definition, however, is coming from the parents. Paul's pursuit of science may be accompanied by guilt unless he is later able to come to grips with the mechanism giving rise to that choice.

3) The meaning system. This case may appear to be proceeding on the surface, yet, still waters run deep. As this young man embarks upon the period of adolescence, he seems to have achieved a degree of integration that most adolescents will not have for two or three years more. Erikson's definition of ego identity is "the accrued confidence that one's ability to maintain inner sameness and continuity (one's ego in the psychological sense) is matched by the sameness and continuity of one's meaning for others" (Erikson, 1959, p. 89). It would appear that the two continuities in the case of Paul are neatly matched and the result is an absence of conflict up to the present time.

Paul's world is middle or upper-middle class. He lives in this kind of a community. Both his mother and father are college graduates and both went to graduate school. His mother was involved for a short time in a career as an art teacher, a career in which she could find fulfillment by giving herself so that another might become himself. His uncles on both sides of the family are scientists. That he will go to college is a conflict-free consideration except for the reality of money. Yet it is presumed that somehow this will be taken care of.

This subcultural way of life gives structure to Paul's life. There are in this way of life immediate, proximate, and ultimate goals which Paul is aware of, each to the degree of its remoteness from his present life. Meaning in life is presently derived from the enjoyment of scientific hobbies. But further meaning is provided by the existence of agreed upon goals. The interviewer gives some quick insight into the relation between the hobbies, the grades, and the career area.

4) Autonomy. There would appear to be a relatively high degree of autonomous effort in this case. It appears also that there is environmental support for the kind of autonomous effort that Paul makes. He says he converted the closet (S.41). He earns money mowing lawns and is allowed to spend it on photographic material, but there is also a debt to be paid, and here the environment encourages self-control. He is encouraged in his interests by his uncles. There does not appear to be any positive career pressure at home. At least within the subcultural limits, Paul is free, and is given support.

5) Initiative and industry. In some of his reading Paul recognizes the element of adventure, but his romantic streak does not lead him to consider seriously a career as an Air Force pilot. He is aware of one of the things that cannot be ordered by him, his eyesight (S.60). But his career can be ordered in other ways and he is considering many possibilities within the general area of science. The recognition of the economic obligation involved in a college education seems to be relatively high

for the ninth grade. This may be a beneficial result of the savings bank habit. Again in this latter instance, the environment is supporting and encouraging in ways that may initially have little or no meaning but may gradually attain meaning.

Throughout the interview Paul's attempt to conceptualize himself repeatedly implies he does things and enjoys doing them both at home and at school. He was unaware of the unity of his action until the statement in I.37. This unawareness is perhaps characteristic of early adolescence, but the actual unity is perhaps not quite so common. Paul is doing and learning. He is aware of his success and enjoyment in each sphere, school and home. He is saying that he is what he learns. His grades reward his effort. His scores as told to him by the guidance counselor confirm his achievement record. And he is amusingly aware that his parents think well of him for this kind of effort.

6) Identity formation. It would appear that the successful resolution of all the preceding crises has resulted in Paul entering upon the adolescent period with the roots of his identity already formed and functioning. Although Erikson speaks of the need to settle on a vocational identity, it may be that for American middle-class boys the delimitation of an area of interest, within which the ultimate vocational identity will be formed, will be enough. This would seem to be particularly true for those boys who go on to college since this involves deferment of vocational experience. Support for the lack of a firm vocational identity appears to come from the environment in which everyone else is doing much the same thing, and adults don't realistically expect any further vocational specification.

If this approach be true, then we would not expect his adolescent period to be fraught with tensions, unless some new value not affirmed in the meaning system of the subculture is adopted by Paul. At present such a contingency is not visible on the horizon.

Finally, it may be well to note that Paul's kind of identity formation appears to fit the modal career development pattern of the scientist that has more recently appeared in the research literature (for example, Super and Bachrach, 1957).

7) Interests. Paul's interests are wide (S.36-S.53) and at least those of photography, music, and reading are well developed. Paul doesn't give much definition to his situation through the expression of negative interests, however. Perhaps, Paul is making a career of agreeing once he has taken a negative stand against his father.

8) Self-evaluations. These have been considered fully in the previous sections.

9) Interpenetration of awareness gained from experiencing life's discontinuities. This interview illuminates three of life's discontinuities, school, college, and vocation. Paul is still only on the step of induction in experiencing the discontinuity of school attendance. He is on the step of clarification in relation to college attendance and his attendance seems assured both because of his school experience and his parent's pressure. Which college it shall be is not even being explored and is only a part of the clarification of the vocational choice. Paul knows that college must be compatible with the vocational objective, that's all. Paul's career development is fairly mature. Paul's career development has the slight suggestion of potential brittleness, however. "They" are defining the situation except for the permitted rebellion against father (see Congdon, 1960).

10) Structure and career development. Paul reported upon his life when requested by an interviewer intent upon revealing the extent of Paul's appreciation of his career development. I chose the case to emphasize that careers are apparent by grade nine (rudiments appear earlier, of course). The analysis of the conversation between Paul and his interviewer suggested that the present course of Paul's vocational choice can be made evident in relation to a paradigm of the process of differentiation and integration as this paradigm is applied successively to the several discontinuities of life requiring choice and commitment in education and work. That paradigm which will be explained fully later essentially denotes the delaying mechanism of decision and of action upon decision, a mechanism necessary for rational endeavor.

It is possible to choose educational and vocational pursuits on a rational basis. Not everyone does so every time, of course; here I note only the potential. When one chooses on a rational basis he has opportunity to lay out alternatives, to assess both wishes and risks, to examine favored alternatives, and to construct a definition of himself in the situation which guides his pursuit of the elected course. The existence, validity, clarity, force, tentativeness, and openness of this definition, as its actual and imputed consequences are experienced, are of concern in the study of career development. It is for this reason that the existing career development of Paul is analyzed not only in terms of the vocational choice but also in terms of psycho-social crises, interests, self-evaluations, and awareness of the depth of the complexity of the situation. All of these topics must be brought within the purview of a science of career development.

My comments upon the reported life situation of Paul deliberately reflect my concern for the complexity, clarity, and validity of the basis and motivation for choice as well as for the "balance" of the commitment to action so far inherent in his career development. I have let ideal circumstances guide my thinking and have thereby set them up as goals. This is not generally true of prior work in vocational development as I will show in the next major section. But first I want to say a littl more about choice in collaborative ability, the basic conceptions in career development.

11) Vocational activity in collaborative activity. Vocational activity takes place among coalitions of people. Of course, not all activity among coalitions of people is vocational, but all vocational activity is collaborative activity.

I have a twofold purpose in noting that vocational activity is collaborative activity. In the first place I want to remind us that vocational activity is work and that work involves the problem of collections of people who must mutually ascertain the value of activity. In the second place I want to note that collaborative activity involves intention. The intention must be worked out by the parties directly involved in the "co-labor" of vocational activities. However, the intentions may frequently be subject to the influence of an independent body. This influence may determine the limits to which the intentions of either or both members of the primary work group can be pursued. The policies of government and/or of other financial investors provide obvious illustration of how the activities of a secondary group set limits upon the intentions of a primary group. Such limits determine how far a mutual goal can be sought by employee and employer.

12) Choice in collaborative activity. Our consideration of career development starts with realization that we deal with the natural history of a person as he seeks value while pursuing the intentions which make his activities those of work. However, neither value nor intention are determined once and thereby fixed forevermore. The value of the same activity fluctuates. Valued activities fluctuate. Those who determine value change for a person. Similar things can be said of intention. The intentions of the employee and/or employer may also change. However, the important point of modification in values and intentions is that opportunity for choice exists at each of the times when values or intentions shift. I take the subject of career development to be the origination and pursuit of value and intention in collaborative contexts through opportunities for vocational choice.

13) Vocational choice. The choice of a vocation takes place throughout life. There is initial opportunity to choose during common schooling. In Canada this opportunity exists in the election of the program of studies during the course of secondary education. Should a pupil elect the high school leaving program he must then specify vocational choice further through the election of one of the types of vocational-technical education which are available. The pupil who earns his certificate of completion in one of the high school leaving programs later further differentiates his choice of vocation as he enters upon work. Still more differentiation occurs as that former pupil moves from job to job after testing himself upon his first job.

The process of differentiation in vocational choice which occurs in high school and early life for the high school leaver is not different for the student who pursues the university program in high school -- the process is merely delayed. The high school leaver has greater opportunity for vocational differentiation than does the university graduate. Unfortunately, the high school leaver may not take advantage of this increased opportunity. Furthermore, the opportunity frequently arises when help is not available to the high school leaver as it would be in the university.

14) Career development. I have now introduced the notion of vocational choice. Furthermore, I have noted that vocational choice becomes differentiated throughout life. This differentiation in vocational choice builds the structure of the developing career. The theory of career development is relatively new and is therefore not highly developed. I share what I can, however, because the theory may offer perspective in which problems appear more clearly. Furthermore, a review at this time will further delineate the subject of career development for us.

Progenitors of Career in Occupational Psychology

The origin of the concept of "career" in occupational psychology is conveniently marked by the year 1950. Prior to that time, studies in occupational psychology were primarily of "success," "adjustment," and/or interest. After that time, attention turned to vocational development. Interest, adjustment, and success are aspects of career, but not the career itself. Why?

Success and adjustment both deal with the events of the life after the election of an alternative has taken place. Earlier events may be considered as predictors of later success or adjustment in these forms of study but little or no effort is made to frame such variables in relation to the process of choosing. Furthermore, in these studies, only one occasion for choosing is under consideration at any one time. Since the career arises and is pursued in a context of choice, studies of success and of adjustment are not studies of careers, although they are studies of several consequences of career. Davis, England, and Lofquist (1964) attempt to remedy these defects by means of their theory of work adjustment. However, their theory accounts for accommodation but not for choosing. And, yet, the concept of choosing is essential in a theory of career development.

The consequences of relevance to career which come into consideration in studies of success and adjustment are the judgments of another about the accomplishment and accommodation of the subject to the demand of his opportunity. The fact that (in a sense) "the job makes the man" is of importance in career. The meaning to the subject both of the demand for task orientation and of his acceptance of responsibility for it as somewhat represented in criteria (first of success and then of adjustment) are matters of high relevance to a theory of career development. The theory of Davis, England, and Lofquist (1964) therefore contribute to the theory of career development in this way.

The studies of interest which have developed in occupational psychology are of considerable relevance to a theory of career development. The habit of investigation in the past, however, has been to anticipate either the goal chosen or its appropriateness on the basis of an inventory of interests. Interests have therefore not been placed in relation to choice as something which might well guide choosing if the history of preferences is known and if responsibility for election is fully assumed by him who chooses. Furthermore, neither studies of success nor of interests have been greatly concerned with the modification of goal and the belief in its value and pursuit which result from the transaction of a person with his wishes as he experiences the consequences of acting to secure his wishes while being in interaction with others who wish for themselves as well as for him. Occupational psychology is deficient in these important regards which must be incorporated into career development theory.

1) Vocational development: The career takes shape in occupational psychology. Studies of interest, success, and adjustment form cornerstones in the theory of career development emerging in the U.S. About 1950, the three cornerstones were placed into a structure of vocational development.

Particularly note the roles of both time and choice in a theory of vocational development as I next discuss lines of investigation in 1) occupational inheritance through educational choice, 2) occupational choice, 3) personality and occupation, 4) accommodation of personality through work, 5) career patterns, and 6) vocational development.

2) Occupational inheritance through educational choice (Shea, Cicourel and Kitsuse). Work skills are specific to a person. Therefore, work skills must be transferred from generation to generation. At present, education is the primary medium for the transfer of work skills.

The so-called life chances of a person ride with his inheritance of social position. In the U.S. social mobility may occur during social inheritance. The educational level of the child is a prime index of that future social position.

Stouffer became particularly interested in the role of education in the inheritance of social position during the 1950's. He and his students such as Shea have studied the relationship between the social class of the family and the type of program the child elects in the secondary schools. These investigators have been particularly interested in who fails to elect and pursue a college education. Shea (1964) makes headway in the problem of determining who falls off the ladder of scholastic ability. Parents strongly opposed to college do discourage the hopes of their children when the possibility for financial support of college education does not exist in the family. However, even the neutral attitude of parents is not too detrimental to the college intentions of bright youngsters at the age of transition from elementary school to junior high school.

Cicourel and Kitsuse (1963) portray an excellent frame for educational choice in social inheritance but their ensuing evidence which indicates that school counselors may erroneously interfere in social mobility seems insufficient.

3) Occupational choice (Ginzberg). Ginzberg's theory of occupational choice (Ginzberg, Ginsburg, Axelrad, and Herma, 1951) extends the study of vocational choice from the choice of education into the choice of occupation. In essence, Ginzberg's theory proposes that:

1. Occupational choice is a process;
2. The process is largely irreversible; and
3. The process takes place in three periods, fantasy, tentative, and realistic, the last two of which are further differentiated into stages as noted in Exhibit 1.

Exhibit 1

The Periods and Stages of Occupational Choice
(after Ginzberg, et al., 1951)

A. Period of Fantasy Choice (Ages 10 and younger)

B. Period of Tentative Choice

    1) Interest stage (Ages 11-12)
    2) Crpacities stage (Ages 13-14)
    3) Values stage (Ages 15-16)
    4) Transition stage (Ages 17-18)

C. Period of Realistic Choice

    1) Exploration stage (Ages 18-20)
    2) Specification stage (Ages 19-21)
    3) Crystallization stage (Ages 21-)

Ginzberg's theory has credibility because it relates itself not to the occupation chosen, the goal of the occupational psychologist before

Ginzberg, but to the fact that we require the choice of an occupation in the U.S.

Note that Ginzberg basically assumes that occupational choice represents the approach of, and passage into, a discontinuity having to do with work. This is why occupational choice is a process. A discontinuity is anticipated during the lead time of that discontinuity and the passage of the subject into the chosen experience provides opportunity for reconsideration of wish in relation to requirements as they are experienced.

Occupational choice is irreversible because opportunities do come and go and because the resources of time are finite for a person. Furthermore, we also help occupational choice to become irreversible by the fiscal limitation of opportunity for later trial upon graduation from educational institutions.

4) Personality and occupation (Roe, Holland, and Bordin, Nachman, and Segal). Although Ginzberg's theory portrays what might be the process through which the choice of an occupation goes, it does not attempt to account for the type of work which is elected in the course of the process. The spectrum of occupations in the United States is many-hued and extremely dense. Attend to the kinds of jobs a person holds throughout his work history as well as to their number, levels, sequence, and longevity and you take another step towards a theory of vocational development. Do different types of people actually work in different jobs? This is the essential question in the relation of personality and occupation. The question has been approached in several ways but I shall consider only

the work of Roe (1956, 1957), Holland (1964), and Bordin, Nachman and Segal (1963) because it is the main work in the area.

The work on personality and occupation conducted by the occupational psychologist is primarily directed towards rudimentary explanation of why people engage in the type of work they do. The explanations sought are, however, not reviewed by the people studied. Furthermore, the explanations sought are those which account for the division of people in the aggregate and do not attend to individual variability within the career pattern. This line of research essentially fixes the membership of the person in an occupation and seeks explanation of the person's presence in the group he has adopted " . . . at the time that serious and encompassing commitments are made." (Bordin, Nachman and Segal, 1963, p. 108) The explanations offered assume that work gratifies needs and that the person's choice of work is essentially a matter of need gratification. In this regard, the study of personality and occupation coincides with the theory of work adjustment proposed by Davis, England, and Lofquist (1964). However, the latter theory also considers work demands as well as need satisfaction.

The study of occupational classification through personality and occupation is directed toward study of need gratification. Roe's classification of occupations is founded in one aspect of Maslow's theory of motivation (1954) but is largely empirical. Holland's system of occupational classification is only empirical but takes advantage of need theories because they were in the logic of the instruments which Holland uses. The system of Bordin and his colleagues is founded in psychoanalytic theory. Bordin et al. adopt the method of deduction in their investigations rather than the method of induction as Roe and Holland have largely done.

The psychoanalytic dimensions of personality and occupation which Bordin, Nachman and Segal believe to be of relevance to occupational choice are noted at the end of Exhibit 2 where they may also be compared with the dimensions proposed by Roe and Holland.

Exhibit 2

Manifestations of Personality in Occupation: Psychological Dimensions of Occupation

I. Level and Group Classification (After Roe, 1956)

  A. Level - six divisions largely determined by the degree of responsibility, capacity, and/or skill offered or needed.

  B. Group

    1. Service
    2. Business contact
    3. Organization
    4. Technology
    5. Outdoor
    6. Science
    7. General culture
    8. Arts and entertainment

II. Typology of Occupation in Personality (After Holland, 1964)

  A. Realistic
  B. Intellectual
  C. Social
  D. Conventional
  E. Enterprising
  F. Artistic

III. Basic Need Gratifying Activities (After Bordin, Nachman, and Segal, 1963)

  A. Dimensions

    1. Nurturant (feeding, fostering)
    2. Oral aggressive (cutting, biting, devouring)
    3. Manipulative (physical, interpersonal)
    4. Sensual (sight, sound, touch)
    5. Anal (acquiring, timing-ordering, hoarding, smearing)
    6. Genital (erection, penetration, impregnation, producing)

7. Exploratory (sight, touch, sound)
8. Flowing-quenching
9. Exhibiting
10. Rhythmic movement

B. Aspects of dimensions noted

1. Degree of involvement
2. Instrumental mode
3. Objects
4. Sexual mode
5. Affect

The theory of Bordin differs from those of Roe and Holland in important operational ways. Bordin proposes a set of dimensions against which both the needs of a person and the gratifications offered by occupations can be viewed. The assumption of Bordin as well as of Roe and Holland is that choice will be of occupations in which there is congruence between individual needs and gratifications possible from occupation. Methodologically, however, the systems of Holland and Roe permit an occupation to rest in only one category of their classification. Hence, it is not possible to see the occupation in the full variability of needs as this variability is likely to exist in persons. Bordin is free of that operational limit, however. More importantly, Bordin is entirely free even of occupation. Hence his system permits a person to consider any job within an occupation and even any position within a job as fair game for the expression of individual needs. The explanatory systems of Roe and of Holland do not have these degrees of freedom.

5) Accommodation of personality through work (Becker, Geer, Hughes, and Strauss). Work requires the adoption of a role appropriate to the efficient discharge of the duties of a job. The assimilation of the role frequently requires expenditure of time and effort on the part of an

employee. Occasionally, there are long periods of induction into a role. Becker, Geer, Hughes, and Strauss (1961) provide a fine illustration of the induction of the student into the practice of medicine through a medical school. The induction of vocational-technical students takes place sooner than does the induction of medical students. The differences in age, knowledge, and experience of the students in the two inductions undoubtedly create differences in the possibilities and accomplishments in each. Nevertheless, there appear to be significant formal similarities in the two inductions.*

The study of accommodation of personality through work is a part of the incorporation of the demands of work by the worker. In this regard, the work of sociology on the incorporation of work roles overlaps with the theory of work adjustment proposed by Davis, England, and Lofquist (1963). The latter theory deals with the result of assimilation, not with the process of assimilation, however. We must largely turn to sociology at present for our knowledge of the process of demand assimilation.

6) Career patterns (Miller and Form). I diverted my development of the theory of vocational development from the incorporation of time into the study of occupational choice for consideration of personality and occupation and of the incorporation of work roles. I have used the work of Ginzberg to initiate discussion of the variable of time into the differentiation of occupational choices. Now I shall note that Miller and Form (1951) extend Ginzberg's stages into a lifetime. They also introduce the concept of career pattern.

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* Becker plans to study the induction of students into the technical schools of the U.S.A.

Miller and Form portray the meaning of work for the American in a text on occupational sociology. They note that this meaning varies with the periods and modes of assumption of economic responsibility for life which are permitted and adopted. Five periods are identified as noted in Exhibit 3.

Exhibit 3

Work Periods
(After Miller and Form, 1951)

1. Preparatory work period -- the age of the "chore" for the child;
2. Initial work period -- the age of work for pay outside the family but on a part-time or secondary basis;
3. Trial work period -- the age of the first full-time job and of instability until the same job is held at least three years in a row;
4. Stable work period -- the age of immobility in job, ordinarily beginning about age 35 and continuing until retirement; and
5. Retirement period -- the age of dependency upon one's wits of days of yore, an age ordinarily beginning at 60 or 65 and increasing in length at the present time.

These work periods expand Ginzberg's periods into those visible in a life pattern. The life patterns of Miller and Form are those dependent upon the number, kinds, and levels of jobs held. Within the categories of kinds and levels of job, the career pattern takes into account the sequence of jobs and the person's duration of stay in each. For instance, the stable career pattern is one in which the work history stabilizes without a period of trial jobs while the conventional pattern is one in which the same stability is reached after a period of trial jobs.

Super distinguishes career patterns for women. However, the idea of the career pattern remains an intriguing idea not yet well investigated in the U.S.

7) Vocational development (Super). Super united social inheritance, occupational choice, personality and occupation, accommodation to work role and career pattern in his important papers on a theory of vocational development (1951 and 1953). The theory consisted of ten propositions which essentially stipulated:

1. the multipotentiality of men and of work;
2. the process of educational and occupational choice; and
3. the agency of the person in the election of study and work.

Super's denotation of the centrality of the person in the process of choosing constitutes a major step in occupational psychology and changes its emphasis from occupation, the task done without awareness or judgment of acceptability, to vocational development, the career of the person doing the task.

Super's assumption of multipotentiality in men and in work is essentially the foundation of occupational psychology in its early phases and, as I have noted, is also the lure for efforts to study personality and occupation. Super incorporates Ginzberg's theory of occupational choice into his theory of vocational development but expands its ten-year span into a theory of life stages based upon their earlier denotation by Buehler (see Super, 1957, p. 71). The life stages in Super's theory include four of the five life stages of Buehler, namely, the stages of Exploration, Establishment, Maintenance and Decline. Buehler's first life stage, that of Growth, is not considered by Super but the second stage, Exploration is sub-divided into three sub-periods. The sub-periods and the stages as well as their salient qualities are noted in Exhibit 4.

Exhibit 4

Life Stages in Vocational Development*
(After Super, 1957)

	Ages
Adolescence as Exploration: Developing a Self-Concept	15 to 25
The Transition from School to Work: Reality Testing	
The Floundering of Trial Process: Attempting to Implement a Self-Concept	
The Period of Establishment: The Self-Concept Modified and Implemented	25 to about 45
The Maintenance Stage: Preserving or Being Nagged by a Self-Concept	45 to about 65
The Years of Decline: Adjustment to a New Self	65 and beyond

*The stages are from "Contents," p. vii. Ages are taken from pages 71-72.

Super's stages indicate his structuring of the self-concept in vocational development. Self concept refers to the conception of the position a person wants to be accorded at work. The development of this conception of self at work encounters the following problems in the sequence noted:

1. Inception
2. Use in context which involves
    - a. Several trials
    - b. Modification
    - c. Stabilization and insistence
    - d. Defense, if established, and
    - e. Ultimate abandonment

A Language of Career Development in Occupational Psychology

1. Career as Personally Determined Life Direction

Super has brought vocational psychology to the point just noted. It is a mark of the genius of the man that the point is so far advanced from the understanding of vocational psychology which existed before he initiated his efforts to explain vocational development. Nevertheless, a new point now needs clarification. The clarification is needed both to bridge a gap between personality and vocation and to denote the goal for a program of Guidance.

Super introduced the person as an agent in the process of vocational development. His contribution to that theory has so far been only a catalogue of those aspects of taking a position among one's fellows which stem from the meeting of discontinuity of relevance to vocational development. The result is that the theory is now subject to the restraint of structure as this is presently arranged in our society. A step needs to be taken which places the person, not the structure, in the center and therefore makes possible study of the election and cultivation of structure by the person. When this step is taken, career, not vocation, will be the central issue in vocational psychology. Furthermore, we will be embarked upon the clarification of a theory of career development rather than a theory of vocational development. Finally, we will have a goal for a program of Guidance which makes direct work, person by person, incontrovertible.

It will be some time before a theory of career development will form. There are aspects of its language which can now be specified and

I shall attempt that specification. I shall do so by considering: 1) differentiation and integration in problem solving; 2) the structure of time occupancy; 3) purposeful action; and 4) the purposing of behavior through Guidance-in-education. As I start on this excursion into the ether of concept, I urge you to remember the case of Paul. Paul's career and yours can serve as the anchor of percept in the sea of concept upon which I now journey forth.

2. Problem Solving in Career Development

Differentiation and Integration in Attaining Rational Solutions to the Problem of One's Vocational Situation. Differentiation originates in various ways. One of the ways is from an effort to consider a problem rationally. This is a condition of differentiation which can be represented paradigmatically. Since the paradigm I will develop is of this presumably highest form of differentiation, it is likely that lesser forms of differentiation are thereby included. It seems sufficient to suggest a paradigm of the process of reaching a rational decision since such is the differentiated and later integrated condition of thought in life which the practices of Guidance attempt to facilitate.

The onset of rational differentiation is occasioned by the experiencing of *a problem*.[*] The individual becomes aware that the state of his present situation is unsatisfactory or is eventually likely to become unsatisfactory. A *decision* must be taken. The problem of deciding may be profitably divided into two aspects, an aspect of anticipation or preoccupation and an aspect of implementation or adjustment.

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[*] I underscore the key elements of the paradigm. (The paradigm is presented in greater detail in Chapter 2.)

Anticipatory behavior may itself profitably be analyzed into sub-aspects or steps. As noted in Figure 2.1 (see Chapter 2) relevant steps are those of exploration, crystallization, choice, and clarification. During exploration, activities are somewhat random and likely to be overly acquisitive. As patterns begin to emerge in the form of alternatives and of their consequences, we can speak of crystallization. After crystallization takes place, choice becomes easy and the person begins to organize and to clarify in preparation for implementation, the second major aspect of his decision. An important outcome to be sought in the aspect of anticipation is the origination of goal or goals and the development of a basis of belief in it or them. Another important outcome is the devising of means within, or potentially accessible to, one's command which are relevant to attainment of desired and sought goal or goals. Both of these concepts are denoted by the conception of organization in the paradigm of Figure 2.1. They are explained more fully in the specification of a paradigm of purpose in the next section.

Imaginative concerns meet reality on the day of initiation or implementation; a step of social induction begins. Interaction is a necessary part of implementation. A person with a resolve of his own enters a social system which he has previously only somewhat nebulously charted. He hesitates; he looks for cues; in short, he is inducted into the social system unless he is immediately repudiated by it. Superiors and colleagues associated with the person start the process of perfecting the "projections" of their expectations for him. Eventually, however, a person ascertains that he is accepted; he "arrives," so to speak. A step of reformation is initiated. The primary mode of reaction is no longer responsive; it becomes assertive. As the need for assertiveness attains its desired effects, however, a step of integration ensues; the status quo is no longer challenged compulsively. Equilibrium is reestablished. A new or different goal can likely be taken on with more grace than in the absence of attainment of this condition. If integration does not occur, the person is mastered, not master.

The paradigm in Figure 2.1 is conceptual, not behavioral. Therefore, the sequence of the steps within an aspect may be irrelevant in any particular instance. Furthermore, progress often necessitates return as well as advance. This possibility is figuratively denoted by reversed arrows in which the advancing arrow is the longer. The fact that a person's intention becomes a part of the region in which he operates is figuratively denoted by the symbol which is like a "u" on its side. The direction in which the assimilation is primarily taking place is denoted by the open end of the lazy "u." The thing -- i.e., the organization of person or group -- which is being assimilated in each mode of interaction is placed at the closed end of the "u."

Time and Occupation: A Frame for Career Development.

The paradigm of differentiation and integration represents the human events, in potential at least, at any of the discontinuities which one may encounter in life. Career development consists of both the history of the effects of seeking and experiencing and the present goals and plans and the bases for holding those goals and the plans to secure them. The locus of career development in the paradigm of differentiation and integration is therefore in the concept which has been designated as organization. This is the concept first designated as little "o" in the aspect of anticipation and later designated as big "O" in the aspect of implementation.

Discontinuities are experienced seriatim, of course. A person is quite likely to be experiencing the effects of implementing the plans and their revisions which are associated with prior discontinuities as he is also anticipating one or more future discontinuities. The plans and the experiences of a discontinuity are therefore a part of a more comprehensive organization which the person is evolving. This more comprehensive organization is his personality. Career has to do with that part of the organization or personality which is associated with the meeting of discontinuities requiring decisions about work. The organization or personality consists of the sets of a person's attitudes towards himself in his situation and of the affective and cognitive bases for them. Personality and career are therefore separable only for the convenience of analysis and communication. The two are interpenetrating as are any two or more ideas. It is always possible, therefore, that modification of a part or a whole can have a profound effect throughout the whole organization or personality.

The career discontinuities which a person experiences throughout life have their origin both in the body and in the society. On the one hand, discontinuity is experienced because of growth and decline in physiological and neurological potential. On the other, because of the actual or imputed demands which others make on one.

O'Hara and I (Tiedeman and O'Hara, 1963) attempted to approximate a few of the effects upon time occupancy which each of these kinds of discontinuities may have upon the career. Our effort was directed to time occupancy because time is the one prime resource which a person has to invest. Discontinuities which affect the resource of time are likely to have a profound effect upon the opportunities of the person for career. The discontinuities which O'Hara and I considered in the economy of time occupancy are noted in Exhibit 5. (Also refer to Figure 2.2 in Chapter 2.)

Exhibit 5

Biological and Cultural Conditions "Imprinting" Upon Career
(After Tiedeman and O'Hara, 1963)

I. Biological pre-emption of time occupancy by

    A. Sleep
    B. Play and relaxation
    C. Eating
    D. Safety

II. The staging of expectations for one's independence in one's

    A. Household
    B. Yard and neighborhood
    C. Controlled community (e.g., church, school, college)
    D. Work
    E. World

III. The staging of identity as

    A. Person
    B. Child
    C. Friend
    D. Player
    E. Boy or girl
    F. Student

G. Worker
H. Husband or wife
I. Parent
J. Citizen
K. Man

IV. The staging of study and work discontinuities

A. Selection of part-time employment while in school and afterwards
B. Selection of subjects to be taken in junior high school
C. Selection of subjects to be taken in high school
D. Selection of a college
E. Selection of a program of study in college
F. Selection of a graduate school
G. Selection of a program of study in graduate school
H. Selection of an Armed Service
I. Selection of a specialty in an Armed Service
J. Selection of a first full-time position
K. Selection of another position when dissatisfaction arises over a former position or when a former position is abolished or taken away
L. Retirement

3. Purposeful Action

Career in Identity. Is identity gained or given? Actually, the answer lies in the union of the two conditions -- what is wished in the way of recognition of one's position is received. This assumption has so far guided my designation of career as the position in society which the person, even momentarily, asks the world to accord him. My effort to place career in identity has so far noted:

1. that career is a concept and must therefore be analyzed as guided thought if it is to be conceived as the system lending direction to a person's vocational behavior as I would like it to be conceived;

2. that the person may illuminate his conception of his career by placing himself in relation to the numerous choices he is required to make throughout his life and by considering choosing as a paradigm of differentiation and integration; and

3. that the structure of choice has points of inception which are of both internal and external origins.

Erikson (1959) has provided an explicit frame for the development of ego-identity. The psycho-social crises of Erikson's frame are noted for you in Exhibit 6 where you will also find notation of the age interval in which the crisis is characteristically encountered and resolved. You will note that the psycho-social crises of industry and of identity occur within the interval and program of the school.

Exhibit 6

Psycho-Social Crises in the Development of Ego-Identity
(After Erikson, 1959)

	Psycho-Social Crisis	Life Interval in which Primarily Experienced
I.	Trust vs. Mistrust	Infancy
II.	Autonomy vs. Shame, Doubt	Early Childhood
III.	Initiative vs. Guilt	Play Age
IV.	Industry vs. Inferiority	School Age
V.	Identity vs. Identity Diffusion	Adolescence
VI.	Intimacy vs. Distantiation	Young Adult Age
VII.	Generativity vs. Stagnation	Mature Age
VIII.	Integrity vs. Despair	Retired Age

Although Erikson deals extensively with the psycho-social stages involved in the attainment of recognition sought, he does not explicitly specify the operations of seeking in which people may engage. The mechanisms must be specified if the likelihood that career will be a part of identity is to be increased. This is the step I shall attempt next.

Career is the imposition of direction into the vocational behavior of a person which is subject to his comprehension and will. The paradigm of differentiation and integration suggests the steps of reflection upon choice and experience which through the organization of personality can lead to the harmonization of wish and experience. I have so far failed to specify in that paradigm what the operations must be in the attainment of an organization more likely to lead to the harmonization of wish and experience. I therefore shall next engage in the specification of a paradigm of _purposeful action_, the mastery of which places the person in command of his destiny. Such mastery is, of course, needed if career is to be in identity. The paradigm has considerable implication both for Super's contention that vocational development is the formation and implementation of a self-concept through vocational activity and for Erikson's theory of ego-identity.

A Paradigm of Purposeful Action. A series of _discontinuities_ is ordinarily experienced during life. The school program places children in a sequence of events from approximately age 6 through about 25. The events provide a series of opportunities in which young people meet one discontinuity after another in this school structure. The concept of _discontinuity_* is a key idea in the paradigm of purposeful action which Field and I have proposed (Tiedeman and Field, 1962). Consider now the opportunities that exist for discontinuities to occur in a school and think of a program of Guidance in which efforts are made to see that children learn how to meet and learn from discontinuities.

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*I again underscore the key elements of the second paradigm.

Let's pause now, though, and be sure that we share comprehension of the term "discontinuity." In experiencing a discontinuity, a person 1) wants something; 2) tries for it; and 3) risks something in the attempt. A discontinuity familiar to all is the transition of a youth from elementary to secondary education. In this transition a youth moves from something that he's experienced to something that he's only anticipated. There is a break in his acquaintances and in his position. There may also be discrepancy between what he has anticipated and what he may later experience. Finally, there is responsibility for our youth, at least in the U.S.A., to pick his own goals and to decide upon means he will adopt to attain those goals. A discontinuity potentially possesses each of these elements. A discontinuity is an open part of a person's life. It is a part when the answers are not all in but he is held responsible for moving, in a supposedly forward direction, in the course of experiencing the arrangement. A program of Guidance eventually must help pupils link these discontinuities into chains for their own advantage. However, before speaking specifically of linkages imagine a pupil experiencing any one of the many possible discontinuities as I speak more specifically about the elements which any one of the discontinuities has.

Two specific aspects of a person's situation can be partially known at all times as he approaches and experiences a discontinuity. One aspect is the "currently experienced"; a second, the "currently desired." On the one hand, we have what the situation is; on the other, what the desired situation is. Before purpose can exist operationally, it is necessary for the currently desired, or ends, to come into existence.

This stipulation is necessary because purpose is a rational means of moving toward something which is wanted or desired. If we are to help children establish purpose through the Guidance program, it is necessary for ends or currently desired things to come into existence in the minds of those children we are seeking to help. The currently desired can come into existence either before purpose is achieved or simultaneously with the origination of striving and the initiation of action to satisfy it. I mention this because I'm sure you have found that just beginning to talk in purposeful ways can introduce into the minds of pupils the need for goal and/or desire.

As a person not actually engaged in evolving the pupil's purpose, we can think professionally of the currently experienced circumstances and the currently desired circumstances of a pupil who is evolving a purpose. The goal of a professional in Guidance is to get pupils to think in terms of purpose, not in terms of attaining the counselor's goals but in terms of evolving his own goals. The counselor's goal is to get pupils to compare the currently experienced and desired remembering that the currently desired does not exist (it's only a concept of what might be). Nevertheless, it's still possible to compare what is with what might be and to note a difference. Upon noting a difference the pupil can then choose, develop, modify, and perform so that he moves from where he is toward where he thinks he might like to be. This process of comparing the existing with the desired, of planning to secure the desired, and of acting contingently upon that plan and its modifications is what Field and I portrayed as purposeful action. It means action which is not random action; it is action directed towards the currently desired or towards modification of current desires. Since purposeful action is not random, it is activity which is more likely to achieve the currently desired because it is based contingently upon the currently experienced.

The Economy of Purpose. The noting of differences, planning, and acting contingently with the possibility of revising the plan are parts of a more comprehensive economic model.

A gap exists in a discontinuity as I have indicated before. Purpose can evolve in the bridging of that gap. In "bridging," a person leaves something he knows and moves to something he does not know but perhaps has imagined. This, of course, involves the risk of resources which the person has in his command. The resources available are of two kinds, natural and accumulated. The natural resources available to everybody available to everybody are energy and time. Energy and time are two resources which a person can give to the plan, choice, and action which tends to evolve in the pursuit of purpose. However, a person also accumulates resources which are more savings than they are natural resources available momentarily for reinvestment. In a sense, energy and time represent "income." "Savings" are not alone the tangibles like money, however; they are also the psychological accumulations from a person's experience, namely how perceptive and successfully instrumental he is with circumstances in the currently desired and the currently observed. Thus a part of a person's available investment is his perceptivity and sensitivity. Another part of that investment is the skill that he has developed in using resources like reasoning as well as the knowledge he has acquired through school -- reading, writing, arithmetic and so forth.

Investment always involves risk. The risk, of course, is that a bet is placed on the wrong means and/or goals. In bridging the gap of a discontinuity, a person not only risks his energy and time, which can ordinarily be readily replenished, but also the things which are more related to our interests in the Guidance program, namely his accumulated resources, particularly his self-regard and reputation. A person's willingness to risk accumulated resources is a function of his conservativeness and as such represents the element which governs movement into the currently desired. In the ideal, the willingness is a weighing, a balancing of circumstances which are involved in the attainment of purposeful action.

Operations with Purpose. The goal of purposing behavior through education cannot be brought into programs of Guidance until we can begin to direct the attention of others to purpose in operational ways. This is only a first step, of course. It is necessary to be able to recognize purpose when it exists. A logically subsequent step is to learn how purposing can be accomplished once its absence or lack of completeness can be identified.

Field (1964) has specified means of identification of the possibility for purposeful action within interview conversation about vocational choice among those who have not yet worked. Field and I (Tiedeman and Field, in press) are now placing that paradigm into the more general topic of measurement for guidance. The basic problem is to specify how the historical statements which constitute the behavioral sciences can be brought into the meaning system of the person so that the propositions guide his purposes without limiting his goals. Of course, the process of extrapolating from history must itself be made efficient. This is the task for a science of purposeful action.

My premise is that the goal of Guidance-in-education should be to see that students know how to be purposeful. The outcome sought in the program in Guidance should be that the existential problem of people (Frankl, 1959) will both penetrate their awareness and be accepted in appreciation of its value. In short, I believe that engagement in the dialogue of choosing is a responsibility which people both can accept and ought to accept. My belief is founded in the expectation that awareness of widening choices which are available will increase a person's satisfaction with the alternatives that he elects and the choices which he has had opportunity to make. This, of course, suggests that effort should be devoted to make people responsible for what they have chosen.

In order to bring people into awareness of the dialogue of choosing it is necessary to adopt the technique of encouraging people to seek things. We do this in two ways: 1) we help people bring into focus what they are seeking when we are aware that they are seeking something which we can see but they cannot; and 2) we encourage youth to seek when we are aware that they are not and think that they should. We encourage people to seek something because it is necessary for them to do so if they are to develop an attitude toward life as if it were a course which has been theirs rather than a course which others have made for them. In order to accomplish this, the program of Guidance-in-education tries to get youth to look on the resources of the world and the responsibilities in the world in such a way that they are seeking them.

Two risks are encountered in offering people the opportunity to become responsible for their actions through seeking. One risk is that the person may become selfish and not assume responsibility towards other people. The second is that he may imitate the counselor by adopting the counselor's purposes, not merely his urging to become purposeful which is the only goal I desire for the program in Guidance.

In order to combat the possibility of selfishness by emphasizing seeking, it is simultaneously necessary to help people become accountable for what they have done. If we fail to place responsibility for action as we encourage seeking, we encourage only impetuous behavior. The curb on impetuousness is the emphasis of interdependence in the life scheme and the assumption of accountability for one's actions in that life scheme.

The second danger in the cultivation of responsibility in seeking is mimicry. In order to avoid this condition, we must encourage self-initiation. Can self-initiation occur under urging from a second party without loss of responsibility by the principal party? This is the nub of the dilemma in advocacy of the goal I have chosen for Guidance-in-education.

I believe that self-initiation can occur without loss of responsibility. The problem is to gain appreciation of the fact that self is realized in mutuality with society, i.e., that purpose is pursued in coalitions of people who operate in the structure of a society. The counselor must learn this. Each person must learn this. The counselor as he works in schools tries to see that each person learns this. It does therefore seem reasonable partially to reduce the risk that the counselor will demand or be deceived by mimicry by requiring the counselor to learn his lesson before we permit him to teach it to others.

There is the possibility of two tragic outcomes in a program designed to cultivate purpose. One tragedy is that a person will not dare when he wants. The second tragedy is that he does not know how to act purposefully when he wishes to do so. Let us not fear the assumption of the unexamined conscience so much that we refrain from the support of a program of purposing in education. Although I desire neither tragic outcome, it is far more tragic to be without trained capacity when it is desired than to be happy within the ignorance of self-abnegation. The test of the professional in Guidance is that he be able to cultivate purpose without causing either of these tragedies.

Cultivation of the Will to Purposeful Action: As It Is and As It Might Be

When one considers a single discontinuity of life, it is appropriate to speak in terms of purposeful action. With regard to a single event it is possible to consider a fore period and an after period, to think of setting a direction in the interval, and to analyze the consequences of the pursuit of the direction. A person can learn from the re-experiencing of this sequence. It is not necessary that learning occurs in each application, of course. In short, the procedure can illuminate circumstance; it offers no guarantee that it will.

I think of the repetitive application of the paradigm of purposeful action as the purposing of behavior. The desired outcome is the development of a will to purposeful action. The will to purposeful action should be the goal of Guidance-in-education. The purposing of behavior through Guidance-in-education should be the means for cultivation of the will to purposeful action. I elect the term "Guidance-in-education" for the program under consideration for three reasons. In the first place, it limits my interest in the application of the goal to the formal bounds of education. Secondly, it draws about that goal the cloak of public support which is ordinarily accorded the belief in individuality attained within the bounds of structure circumscribed by the wisdom of those to whom the realization of the desires of the young is entrusted. Finally, it denotes an arena in which discontinuity is present; without discontinuity, purposing is impractical if not impossible. Purposing can be made more likely if youth is encouraged to practice it in an educational frame. Purposeful action in the single event can never be guaranteed, however.

The purposing of behavior requires not only the teaching of its percepts but also the application of the paradigm under the supervision of one trained to the goal. I believe that the counselor should assume responsibility for the teaching of the percepts of purposeful behavior and that he should primarily use the teacher as an agent of this aim. I further believe that the counselor should supervise the application of the paradigm in the context of choosing in which the teachings of the school are to be brought to individual advantage. But what is now done in the program of Guidance to make the purposing of behavior more likely and what might be done which we are not now doing?

Let us first consider these questions in terms of the opportunities in which the meeting of life's discontinuities is now supervised. Think back upon the structure of internal and external discontinuities which I laid out in Exhibit 5 in connection with a language of career development. Some of those discontinuities children cannot avoid because they represent hereditary mechanisms; others we require children to encounter because they are a part of a social and cultural heritage considered desirable. We now form coalitions of psychologists, social workers, and counselors to deal with people as they pass through these discontinuities but only as each discontinuity independently bears upon the assumption of purpose in life. In short, the program of Guidance presently 1) concentrates on purposeful action and it does so both: 2) infrequently, and 3) without organization for the purposing of behavior as a goal.

A considerable re-organization of the program in Guidance will be necessary to make the attainment of the goal of purposing behavior more likely. The re-organization will, of course, require more and better trained counselors and psychologists than are now available. But there is a still greater hurdle, namely, the realization of a structure of authority in the school in which it is possible for the goal to be pursued with minimum risk to the freedom of the children the program seeks to free. There can be instruction for goal setting and pursuit. There can be supervision of goal setting and pursuit. However, let there be goal setting and pursuit for the principal party by a second party only at the loss of the problem by the principal party. This is why teacher and counselor have to work at the problem of purposing behavior in a complementary rather than a supplementary fashion. We must provide structure; we must advocate appreciation of structure; but we must leave the problem of goal determination with the individual if we are to have individuality as desired.

When the structure of authority of teacher and counselor is modified as needed to guarantee freedom for youth, the school can seriously begin undertaking a program in which the purposing of behavior is a goal. The program will require:

1) the customary introduction of structure through substance by the teacher as now provided by the shool;

2) the acceptance of the process of education as the goal of education (Bruner, 1962, p. 122) by teacher and counselor and the introduction of the process of learning into the instructional repertoires of the teachers under the supervision of principals and counselors; and

3) the supervision by the counselor of the mastery of the goal of process on the part of each child.

The supervision by the counselor of a youth's mastery of the goal of process will require that the counselor:

1) observe the youth in and out of class as he is going about learning; and

2) criticize the actions of the youth in responsible ways.

Both of these actions will have to occur with a frequency sufficient to produce a cumulative effect in the purposing of behavior. However, the frequency cannot be so great that:

1) the problem of deciding by one's self is eventually removed from the youth;

2) he comes to avoid deciding; or

3) the cost of education becomes astronomical.

Is it probable that purposing will become a reality through education? I honestly don't know, but propose in Section V a structure in which it might happen. Certainly there are many reasons for caution in the pursuit of the objective. Theory, program, and skill are now in a state of only embryonic readiness. Yet there are leads. There are also men of intelligence and wisdom who are anxious to press forward in the denouement of the mysteries of the psychology of the purposing of behavior. Hence, under the guidance of those in whom trust for exploration can be placed, there seems little reason to hesitate if immediate success is not expected of the endeavor. Immediate success is undoubtedly an expectation now impossible of realization.

CHAPTER 8

PERSONALLY-DETERMINED CAREER AND ENTREPRENEURIAL BEHAVIOR: ANNOTATED TEXTS AND CONTEXTS*

Overview

During the academic year 1964-1965 Gordon Dudley, then a student in the Harvard Graduate School of Education, held a research appointment as assistant to Professor Tiedeman, then Associate Director of the Center for Research in Careers. One of the major responsibilities of that appointment was to join a dialogue in process between Tiedeman and Wallace J. Fletcher, Special Consultant in Technical-Vocational Education to the Newton Public Schools and then Research Associate in the Center. Dudley's specific role was to develop an interpretation of that dialogue: to attempt a formulation of the salient dimensions of discussion, to note their divergence and convergence, and, in addition, to suggest implications for related inquiry and subsequent exploration.

With these objectives in mind, Dudley prepared a working paper that focused first upon Tiedeman's current conception of personally-determined career development as a "baseline" for discussion,and then used Fletcher's ideas regarding "entrepreneurial behavior" as the stimulus to analysis and further elaboration.

The paper begins by tracing the significant steps in Tiedeman's move from the psychology of vocational behavior to a conceptualization of personally-determined career. The apparent congruence between

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*This chapter is based on parts of a paper by Gordon A. Dudley and Wallace J. Fletcher circulated under title "Personally Determined Career and Entrepreneurial Behavior: Notes and Comments on a Dialogue" (Harvard Studies in Career Development Number 41).

Tiedeman's and Fletcher's ideas is then explored by focusing upon the process of increasingly adaptive differentiations in thought and action which both Tiedeman and Fletcher seek to formulate as the basis for improved theory and practice. The implications of these ideas then serve as the basis for relating current issues in vocational-technical education to those encountered in the functional analysis of any behavioral system. In conclusion, and as a useful context within which to view current issues in education, work, and career, an effort is made to sketch an historical perspective regarding the concepts of social structure and individuality.

Context: Backgrounds and Ideas of Tiedeman and Fletcher

The work of Tiedeman and his recent students and colleagues in the area of career development is recognized as an important contribution to the field of occupational psychology -- a field which since 1950 has become one of increasing interest and importance to responsible leadership in a wide variety of fields: education, government, industry, and labor. Indicative of this recognition is the fact that his work was selected as one of the five major programs of research summarized for the volume which marked the fiftieth anniversary of the National Vocational Guidance Association, Man in a World at Work (Borow, 1964; Holland, pp. 259-284). It is this body of work and the evolving pattern of concepts that it represents which provides the context of the Tiedeman-Fletcher dialogue and, hence, the context of this chapter.

Four related themes or issues emerge from that context as those most relevant to the immediate concerns of the discussion: (1) the elaboration of ideas by which Tiedeman has moved from a psychology of vocational behavior to a conceptualization of personally-determined career, (2) his efforts to relate this evolving theory of career development to the practice of guidance in education, (3) his concern for statistical procedures and research methodology appropriate to valid educational purpose and professional guidance procedure, and (4) what at this point in the discussion we can only indicate in admittedly vague and preliminary fashion to be his growing concern with a general notion of "discontinuity" as the paradoxical substance of thought and purposive action -- what appears to represent for him the crucial issue at stake in any intellectually and professionally adequate concern for the development of our human capacity for creative risk and personal investment -- for the collaborative context of self-commitment.

Each of these four emerging themes represents a continuing and partial commentary upon the others; each can be differentiated from the total context of Tiedeman's work only by virtue of that benign and necessary artifice exemplified by any form of intellectual analysis and interpretation. Since it is the general pattern of these four themes as they emerge from Tiedeman's recent work which provides the immediate focus for the elaboration of Fletcher's ideas regarding entrepreneurial behavior, a general interpretation of the discussion would have to treat each of those four themes equally. However, in order to bring this preliminary effort to closure, the first of the four shall be emphasized.

Fletcher is director of a $430,000 grant by the Ford Foundation to the Newton Public Schools for the purpose of developing philosophy, curricula and opportunity in the field of Technical-Vocational education. Fletcher contends that a concept of entrepreneurial behavior (which he defines as "the capacity to engage with increasing discrimination in a wide variety of transactions between two or more participants whereby all parties share an assumed risk and the potential for enhanced human resources") -- this notion, Fletcher contends, can provide the basis for development of substantially improved educational programs.

Fletcher's concept suggests an economic model based upon modern game theory. This aspect of his formulation shall be considered in further detail at a later point in this report. However, we might point out here that what he has in mind is perhaps more accurately characterized as an array of cybernetic analogies. Thus, for example, when he speaks of "the enhancement of capacity for risk-bearing" as the crucial attribute of entrepreneurial behavior, he refers to behavior that is effectively goal-directed by means of cognitive structures analogous in principle to the operation of a scanning mechanism. Such behavior and enhancement of capacity proceeds, he contends, through a hierarchy of control functions to generate a series of successively more discriminant personal responses and collaborative engagements.

Fletcher suggests, in addition, that his general concept of entrepreneurial behavior admits of sequential analysis consistent with Tiedeman's paradigm of differentiation. In this regard he would distinguish at least three important analytical stages: (1) the initial scanning stage indicated above, (2) a stage characterized by the commitment of resources to an emerging collaboration -- the stage of decision to risk involvement, and (3) a culminating stage characterized by either (a) the enhancement of resources and increased capacity for more discriminant risk-bearing or (b) the diminution of the capacity for such discrimination and engagement.

Fletcher contends, finally, that his concept is of immediate relevance to educational innovation in at least two important regards. First of all, he suggests that the cybernetic analogy readily generates an array of operational criteria by means of which to evaluate any specific sequence of behaviors specifically with regard to the extent to which personal and collaborative resources for purposeful action are enhanced or diminished. At the same time, he holds that such operational criteria generated by the cybernetic analogy provide the analytical resources required to specify technical-vocational education curricula components or "modules" more consistent with the rapidly changing realities of our modern industrial world. In brief, Fletcher's major contention is that, by means of such a model or perspective with regard to the realities of our rapidly changing educational and vocational world, we possess an array of analytical and practical resources for generating an appropriate level of flexibility of educational decision and involvement.

Our interpretation of the dialogue which has so far developed between Tiedeman and Fletcher as they seek an active intellectual and practical collaboration on issues of mutual educational concern consists of three general areas of primary consideration. The balance of this introduction outlines these three areas and related topics:

1. a review of the first of the four themes which emerge from Tiedeman's recent work in career development as representing the substantive context of the dialogue; the theme: "from the psychology of vocational behavior to a theory of personally-determined career." This review emphasizes the development of two paradigms by means of which Tiedeman has elaborated this theme of his recent work:

a. the paradigm of differentiation and integration in career development (developed in collaboration with Robert P. O'Hara)

b. the paradigm of purposeful action (developed in collaboration with Frank L. Field)

2. a general commentary: exploration of the issues raised by the Fletcher-Tiedeman dialogue specifically with respect to that theme. This commentary includes consideration of four major issues or areas of discussion.

a. introduction: psychological differentiation as an analytical construct in the behavioral sciences

b. purposeful action and entrepreneurial behavior as representative modes of adaptation and "probabilistic" functioning analysis of behavioral systems

c. vocational-technical education and functional analysis of behavioral systems

d. education, work, and career within the context of social structure and history.

Context: Emergence of the Theme

From the psychology of vocational behavior to a conceptualization of personally-determined career: an emerging focus upon the process of choosing within the elaborated constraint of a progressively differentiated vocational commitment. In suggesting the pattern of progress and potential with which he views the field of research in careers, Tiedeman has characterized in Chapter 7 the research in occupational psychology before 1950 as having been focused on success, adjustment and/or interest, with little or no effort made to frame variables in relation to the process of choosing (c.f. 1963b). He views research developments since 1950 as reflecting a more explicit concern with the dimensions of choice and time. These developments he traces in terms of four emergent orientations: (1) occupational choice as a process occurring over time (Ginzberg, et al., 1951); (2) career as a pattern of work periods (Miller and Form, 1951); (3) the congruence between type of work and type of worker expressed as a function of personality structure or psycho-social need gratification (Roe, 1956; Holland, 1959; Bordin, et al., 1963); and (4) vocational development as the integration of occupational choice, career pattern, and personality and occupation by means of the centrality of the person in the process of choosing (Super, 1957).

Tiedeman views his own work and that of his recent students and colleagues as an effort to move beyond a mere taxonomy of "those aspects of taking a position among one's fellows which stem from the meeting of discontinuity of relevance to vocational development." He contends that this move is necessary in order to provide the basis for studying the election and cultivation of purpose by the person. Tiedeman sees this move as one of putting life and career in relation to choosing, one of moving the focus of analysis from the object of choice to the act of choosing...from vocational choosing to life choosing (see Tiedeman also, 1964b).

This effort to put life and career in relation to choosing has generated two major analytical perspectives or paradigms: (1) that of differentiation-integration (developed in collaboration with Robert O'Hara)and (2) that of purposeful behavior (developed in collaboration with Frank Field). In order to sketch the immediate background of this discussion, we shall briefly outline the development of each of these two paradigms.

Differentiation-Integration. This paradigm of rational problem-solving and elaboration of self in vocational situation was originally outlined in a publication of the Harvard Studies in Career Development (Tiedeman, 1960). It was then presented to the 1961 A.P.G.A. Symposium on research in vocational development (Tiedeman, 1961), received further elaboration in connection with a general summary of research done within the structure of the Harvard Studies in Career Development (Tiedeman and O'Hara, 1962), and has been published in what may well by its final form as a monograph by the College Entrance Examination Board (Tiedeman and O'Hara, 1963).

The general strategy adopted clearly reflects Tiedeman's intent to move toward an explicit statement of the process of decision in vocational development. The major contentions appear to be first, that "...the locus of career development is in a presumably continuously differentiating ego-identity as it is formed from experience;" second, "...[that] while such a process may originate in a variety of ways, one of those ways is 'from the set of a person considering a problem rationally';" and third, that this condition of rational differentiation is of crucial importance for two reasons: (a) it is presumed likely that "lesser forms of differentiation" are presumed by or otherwise included in the more general rational paradigm and (b) such a rational process of differentiation and integration is the process which the various which the various practices of guidance are designed to facilitate (loc. cit., pp. 36-38).

Tiedeman and O'Hara's paradigm of "the steps of reflection upon choice and experience which through the organization of personality can lead to the harmonization of wish and experience" (1964b, p. 19) provides for two major aspects or dimensions of process each further differentiated into several sub-aspects or substages. There is (1) the "aspect of anticipation or preoccupation" (further differentiated into four substages: (a) exploration, (b) crystallization, (c) choice, and (d) clarification); and, (2) the "aspect of implementation or adjustment" (further differentiated into three substages: (a) induction, (b) reformation, and (c) integration).

The major elaborations made in the basic paradigm since its original outline in 1960 consist of (1) an effort to extend, by means of Erikson's (1950, 1959) concepts of vocational development with those of personality development, (2) the extensive use of case material to illustrate constructs, and (3) the elaboration of the structure of "time occupancy" as a crucial dimension of career development.

This general approach to an analytical description of decision processes in career development has been criticized by others (including at least one of Tiedeman's immediate students and colleagues) on the basis that it provides inadequate conceptual resources for handling the many crucial non-cognitive dimensions of such a process (Bordin, et al., 1963; Field, 1962). In addition, Tiedeman has himself acknowledged that, while the paradigm "suggests the steps of reflection upon choice and experience which...can lead to the harmonization of wish and experience..., that paradigm lacks explicit specification of its central mechanism, namely the mechanism of organization." (1964b, p. 19)

It was to meet these critical theoretical and practical needs that a paradigm of purposeful action which Frank Field suggested was elaborated and integrated into the general theory, and was, indeed, instrumental in moving theory forward.

Purposeful Action. This paradigm of a mechanism or process of organization for the modification of behavior under the force of the dissonance between the actual and the ideal emerged from the following pattern of work:

Relying in part upon the work of Kehas (in Chapter 3; see also 1962), a fellow student whose unpublished special paper detailed a shift in focus with respect to self-concept (a shift from "self-as-object" to self-as-process) Field (Chapter 4; see also 1962) developed an operational procedure for focusing upon an individual's current experiencing style as the crucial determinant of the choice of purpose and action. In advocating such an approach, Field suggested that individual consistency is seen more clearly in styles of choosing than in the manifest results of choosing. Field emphasized that alternatives are themselves the conceptual creations of the individual (1962, p. 11). In order to "direct investigation toward all sources of individual experiencing styles as these sources are reflected in the manifest effects of style upon the choice of actions in known situations," Field initially formulated a strategy of analysis consisting of four elements: (1) a description of an "ideal" basis for choice, (2) a description of the "expected" basis for choice, (3) a structured model of "ideal" individual development (the longitudinal or process analogue of #1 and (4) a structural model of expected individual development in vocational situation (the application of 1, 2, and 3). In summarizing his formulation Field contended that while Super deals with choice without origin, and Tiedeman and O'Hara deal with purpose as one origin of choice, his strategy provides a means for considering the origins of both choice and purpose; namely: the style of choosing within a specified context (*ibid*., p. 49). In sum, Field's initial contribution represented an operational, vocational implementation of the theoretical approach proposed by Kehas, a detailed rationale for focusing upon the process of "elaborating self-in-vocational-situation" by means of a structured description of those aspects of individual experience style within that situation which affect choice by determining the basis for choosing, by determining the range and nature of those alternatives from which choices emerge. (Field, Kehas, and Tiedeman, 1963)

Field's doctoral dissertation (1964) consisted of a further operational elaboration and empirical test of this general paradigm. This work included a revision of the basic functional aspects resulting in the following four analytical dimensions with which to investigate "elaboration of self in vocational situation": (1) the currently experienced situation, (2) the (concept of a) currently desired (future) situation, (3) the planned/expected situation and events lying between, and (4) a feedback mechanism. It included, in addition, a detailed set of criteria for evaluating "malfunctions" in purposeful action specifically with respect to vocational choice.

Tiedeman's most recent statements with regard to career development theory and research include the effort to integrate these two lines of thought which have emerged from work with colleagues O'Hara and Field (Tiedeman, 1963b, 1964b). This integrative effort appears to take place within the larger context of emerging issues generated by the other three major themes of Tiedeman's recent work: (1) specification of the relationship between the theory of career development and the practice of guidance in education, (2) development of measurement models consistent with the "liberating" dimensions of education, and (3) an increasing regard for the general notion of discontinuity as implicit to any consideration of creativity and the collaborative context of self commitment.

General Commentary on the Theme

The dialogue stimulated by this first of four major themes which emerge from Tiedeman's recent work included extended consideration of the following four general areas of concern.

A) introduction: psychological differentiation as an analytical construct within the behavioral sciences

B) purposeful action and entrepreneurial behavior as general modes of adaptation and probabilistic functionalism

C) vocational-technical education and functional analysis of behavioral systems

D) education, work, and career within the context of social structure and history.

This section of our report consists of an interpretation of each of these four areas of discussion.

By interpretation we mean nothing more formal -- nothing more (or less) formidable -- than a somewhat altered perspective, an effort to see issues in new contexts by viewing them from a slightly different vantage point. The implicit contention of such an effort is not that any one perspective is necessarily more appropriate than others which may be elaborated but that the process of altering perspectives with respect to our immediate subject (the realization of self within the reality of collaborative commitments) represents perhaps our most general paradigm of that subject.

Introduction: psychological differentiation as an analytical construct in the behavioral sciences. Fletcher's concept of entrepreneurial behavior entails a progressive enhancement of the capacity for risk-bearing. As mentioned earlier, he elaborates this notion by means of the analogy of a scanning mechanism which proceeds through a hierarchy of control functions to generate a series of successively more discriminant responses. There would thus appear to be substantial congruence between Tiedeman's theory of personally-determined career and Fletcher's concept of entrepreneurial behavior specifically with respect to the notion of progressive differentiation (and integration) of behavior which both entail. In order to explore this apparent congruence and, at the same time, relate both Tiedeman and Fletcher's thinking to a wider context of behavioral theory, an effort was made to investigate the background and issues involved in the general concept of psychological differentiation within the behavioral sciences. In this effort the following formulations were reviewed:

1. classical or "orthodox" psychoanalytic theory regarding the

psycho-sexual stages of development, a system of behavioral constructs implying a genetic sequence of progressive differentiation of psychic structure (Freud, 1905; Fenichel, 1945).

2. psychoanalytic ego psychology theory specifically with regard to the concept of psychic structure, an analytic construct formulated in order to account for behavior manifesting new structural attributes emerging from a previously undifferentiated matrix of response (Hartmann, Kris, and Loewenstein, 1946; Rapaport, 1951, 1960).

3. similar notions of Spitz (1959) with regard to a "genetic theory of ego formation" which formulates three critical periods of structural differentiation and organization within the first year of life.

4. Piaget's formulations with respect to the development of psychic structure -- particularly the six stages of the sensory-motor period of life (Wolff, 1960; Flavell, 1963).

5. Erikson's pattern of "zones, modes, and modalities" (1950, 1959).

6. Werner's "comparative psychology" of mental development (1957).

7. the more recent work of Witkin and associates with regard to psychological differentiation (Witkin, Dyk, Paterson, Goodenough, and Karp, 1962).

8. Kurt Lewin's "dynamic" and "topographic" psychology (1935, 1951).

The general conclusion derived from this review consisted primarily of two observations. On the one hand, there appears to be an underlying congruence in all of these approaches: in each an emergent and sustained specialization of functioning (observed behavior) is interpreted as entailing the development of an analogous complexity of psychic structure (inferred psychological construct).

On the other hand, the various formulations appear to differ most significantly with respect to the particular analytical principles by means of which an account is offered for the emergence of such specialization of function: Analytic theory invokes a complex interrelationship among (1) instinctual demands, (2) structural "givens", (3) level of maturation and (4) the "vicissitudes" of the environment (Rapaport, 1951). Erikson emphasizes an "epigenetic principle" as a crucial determinant. Spitz has similar recourse to "embryological" parallels and analogies; while Piaget, Werner, and Witkin all appear to share the tradition of Lewin in that they emphasize the descriptive attributes of differentiation as characteristic of psychic development without equal attention to the processes through which such structural changes take place, the processes by means of which such integrated specialization of function emerges from previously undifferentiated behavior.

This emphasis upon the essentially descriptive and static aspects of a structural point of view, at the expense of a more dynamic or functional array of explanatory constructs, has been the focus of perhaps the most serious critical observations made with regard to "psychology done in the tradition of Lewin" (c.f. Hall and Lindzey, 1957, chapter six). In brief, behavioral concepts of differentiation (and integration) derived from this tradition are seriously restricted in two senses. In the first place, they generally do not provide an adequate array of explanatory principles for dealing with a sequential array of behaviors which manifest elaborate, hierarchical principles of integration. In the second place, they do not provide an adequate explanatory account of the processes through which such a complex array of hierarchical structures is acquired. If the dynamics of structural attainment or the processes of structual differentiations of behavior are to be clarified, additional explanatory principles must be provided.

Tiedeman acknowledges these theoretical issues when he states that the paradigm of differentiation "lacks explicit specification of its central mechanism." George Miller and colleagues devote attention to similar issues in their study of Plans and the Structure of Behavior (1960) when they ask, "How do we coordinate several Plans into the single stream of behavior that we have available?" (ibid., pp. 95-96) or, later, "Where do plans come from?" (ibid., p. 177). Karl Lashley raises analogous issues in his paper on "the serial order of behavior" -- "a problem of sequences of action which cannot be explained in terms of successions of external stimuli" (1951, p. 181). In the language of Fletcher's cybernetic model of entrepreneurial behavior we might suggest that it is such issues which require us to posit a "heuristic" dimension to the programming of any automated scanning device which shall simulate risk-bearing behavior. In other words, we now hear Tiedeman's emphasis upon the fact that the "structure of decision must be specified before investigations of the theory of vocational development can enter new phases" (1961, p. 15) with the realization that the paradigm of differentiation is but a first approximation. We hear, that is, a subsequent and perhaps more crucial emphasis upon the notion that "man can reflect these particular matters (those implicit to the differentiation paradigm) into systems permitting organization of diverse sets...(that) it is these systems of secondary (or perhaps more comprehensive) order that specify vocational development" (op. cit., p. 18). In other words, until we have formulated some procedure for making sense of the complex hierarchical integration of the intricate dependencies generated by an overlay of partially simultaneous differentiations we do not have a theory of career development which focuses upon the person as a primary agent of structure within vocational situation. Until, that is, we have specified the "central mechanism" of the differentiation paradigm -- "namely the mechanism of organization" we do not have a theory of career as "the pursuit of intent at work." (1964b, p. 19)

The second paradigm in Tiedeman's general model of career development -- that of Purposeful Action (developed in collaboration with Frank Field) -- represents a theoretical elaboration in response to the issues outlined above. In order, therefore, to extend this report of the dialogue between Tiedeman and Fletcher, we must review the discussion and inquiry specifically with respect to the development of that second paradigm.

In his unpublished special paper, Kehas (Chapter 8; 1962) makes use of Combs and Snygg's notion of the self-concept as a systematizing or structuring of one's self, "the effect of which is to allow the individual to 'symbolize and reduce his own vast complexity to workable and usable terms'" (p. 29). Tiedeman and O'Hara use the phrase "principles of containment" to indicate the need for a more explicit understanding of the means by which consistency is imposed upon the world of experience with "functional adequacy" (1963, p.61). More generally, Tiedeman views his present focus of inquiry with respect to research in career development to be centered upon the formation of cognitive structures which allow for the exercise of initiative at work (personal communication). These statements serve primarily to anticipate rather than specify what Tiedeman has referred to as the "central mechanism" of the original paradigm: the mechanism or principle of organization. Such statements do, however, serve to emphasize that that original paradigm presumes *integration* as well as differentiation. They serve to emphasize, in other words, that a theory of career development which shall focus upon the person as a primary agent of structure within vocational situation must specify the cognitive processes through which the structure of decision is elaborated.

Purposeful action and entrepreneurial behavior: comments on adaptation and probabilistic functionalism. As the preceding section of comments devoted to structural differentiation argues, the original paradigm of career development formulated by Tiedeman and O'Hara does not provide any specification of its central mechanism -- does not, that is, suffice to focus the theory of career explicitly upon the *process* of personal decision within the context of elaborating vocational commitment. As we have seen also, Tiedeman himself emphasizes this point. Further he has extended his general formulation of career to include a second paradigm designed to meet the above theoretical issues. In light of those issues we now review some of the subsequent discussion and inquiry more specifically with regard to this second paradigm developed in collaboration with Frank Field; namely: the paradigm of purposeful action. For it is that paradigm which represents Tiedeman's effort to provide a basis for specifying the crucial mechanism or principle of organization. This discussion shall include some further comment regarding four perspectives or "models" with respect to such "mechanisms of organization": (1) dissonance models, (2) economic models, (3) information processing and linguistic models and (4) models of probabilistic functionalism. (At this point in the discussion "model" implies simply any useful analogue of relevant behavior processes. Some further consideration of the various modalities and logical properties of scientific analogy will be reported in the final section of this paper.)

A. Dissonance Models

In their most recent statement Tiedeman and Field indicate that "in order to make the paradigm of purposeful action represent a process there must be a force or source of energy to explain movement" (1964, p. 9). In light of their more general sympathy with an approach to behavior advocated, for example, by both George Kelly and John Dewey, we are somewhat puzzled by this need for a rather Aristotelian notion of first cause or prime mover:

> "Instead of buying the prior assumption of an inert object, either on an implicit or explicit basis, we propose to postulate a process as the point of departure for the formulation of a psychological theory. Thus the whole controversy as to what prods an inert organism into action becomes a dead issue. Instead, the organism is delivered fresh into the psychological world alive and struggling." (Kelly, 1955, p.37)

> "...if it be true that the self or subject of experience is part and parcel of the course of events, it follows that the self becomes a knower. It becomes a mind in virtue of a distinctive way of partaking in the course of events." (Dewey, 1916, p. 62)

"the change made in things by the self in knowing is not immediate and, so to say, cross-sectional. It is longitudinal--in the redirection given to changes already going on." (op. cit., p. 63) (underlining ours)

The issue raised here(and which can only be explored further during a later part of the discussion) is, simply, that to generate a paradigm of purposeful behavior upon the assumption that there must be some prior principle of force or energy in order to explain movement is to incur problematical (and entirely unncessary) liabilities which become increasingly troublesome at that point in the argument where the necessary effort is made to relate the structure of purpose (the nature of cognitive maps) to the actual process of purposing, the actual use of cognitive maps in the process of directed travel. More of this later.

Tiedeman and Field's argument for a general dissonance model of purposeful behavior is based upon three points: they contend, first, that experience is inevitably discontinuous with our expectations in the sense that we can never predict to our satisfaction the outcome of any particular series of events. Second, they argue that, as a result of such discontinuity between expectation and outcome (or between the "currently experienced" and the "currently desired" as a possible future state), a general "cognitive dissonance" characterizes our efforts to come to terms with experience. Third, the force or energy which they assume to be required in order to explain movement, or action, is, they suggest generated by the awareness of this discontinuity between the actual and the anticipated and/or desired. "In brief,...the experience of cognitive dissonance leads to...discontent...people tend to avoid pain and to desire pleasure"(loc. cit. p. 10). The potential "directionality" of this general energy or force is then accounted for by means of the idea that such discomfort between the currently experienced and the currently desired can be reduced by means of adaptive behavior which, in Tiedeman and Field's frame, is referred to as "purposeful action." Finally, an elaborated control of such a capacity for purposeful action is, they argue, experienced subjectively as an increasing "sense of agency."

Tiedeman and Field acknowledge the similarity of this argument to Festinger's general theory of cognitive dissonance (see, for example, Festinger, 1957). They would point out, however, that Festinger explicitly considers but one dimension of possibility within such a situation of cognitive disequilibrium. Festinger's theoretical strategy is to emphasize the consequences of dissonance between the anticipated and the experienced evidenced by the altering of concepts (the modification of anticipation) in such ways as to better "fit" the "mental" to "reality."* This emphasis represents what Bruner (1957) calls doing psychology in the tradition of Aesop, namely: the "sour grape" strategy of containment or cognitive accommodation. Like Bruner, Tiedeman and Field appear to emphasize at least two points of discontent with such a general formulation. On the one hand, they agree that such a general model is violated by the fact that we frequently increase the pressure on ourselves after a decision or choice has been made and do not necessarily accommodate ourselves so benignly to the impact of the unanticipated or the unrewarding. On the other hand, the Festinger strategy does not provide for any theoretical linking with formulations of the capacity for informed, instrumental action directed toward modifying a "dissonant" reality in order to bring it into better accord with the anticipated and/or desired. Like Bruner, Tiedeman and Field imply that dissonance theory "starts off with an action whose cognitive prerequisities are not stated and then describes cognition only after the action;" like Bruner, their objection to such strategy appears to be that it obscures perhaps the most crucial theoretical and practical aspects of cognition, namely those processes which preceed the making of decisions rather than those that follow the making of decisions. (cf. Bruner, 1957, pp. 151-152). Several issues were raised, however, in further discussion and inquiry specifically with regard to Tiedeman and Field's efforts to provide a more adequate formulation for the aspects of a central organizing principle of decision processes obscured or ignored by the dissonance model which Festinger has developed.

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*Thus, Festinger argues: "it has frequently been stated or implied that the actions of people are steered or governed, at least in part, by cognition... But this states only one aspect of the relation between action and cognition. Equally important is the fact that cognition will be governed and determined, at least in part, by the actions which a person takes...What we mean is that, if a circumstance should arise such that some cognitive elements do not fit or are not in line with a person's actions, there will arise pressures directed toward changing these dissonant cognitive parts" (1957, p. 128). For a more general discussion in which Festinger's model of attitude change is considered in relation to (a) a "congruity" model and (b) a "balance" model see Roger Brown (1962).

In the first place, while Tiedeman and Field set for themselves the task of specifying an organizing mechanism to provide for those dimensions of instrumental or adaptative behavior not provided by a "dissonance" model, they are not entirely explicit with regard to the resources of their explanatory scheme which introduces this possibility. Their contention is that there is an inevitable element of risk-taking, of "bridging a gap," between the actual and the ideal--a commitment of resources in the absence of any final assurance with respect to outcome--which is the essence of human purpose, of purposeful human action.

However, it would seem necessary in providing some more general formulation of such processes to specify the various dimensions of circumstance and character which determine the capacity for risk-taking behavior. And so long as Tiedeman and Field do not add any formal principle to the general dissonance model, so long, that is, as Festinger's resolution may be considered the more parsimonious formulation of the explanatory principles assumed at the outset, it remains difficult to elaborate a more satisfying and fruitful explanatory model of purposeful action--one which entails a process of progressive structural differentiation and discriminant organization of behavior and involvement. A general formulation of an equilibrium, congruity, or balance model (in Cannon's "homeostatic" sense) which provides for the mutual accommodation of organism and environment would have to include more adequate specification of both personal and situational determinants associated with the manifest attributes of "internal adjustment" on the part of the organism and those of "external modification" of the environment. It would, for example, have to relate its explanatory principles more directly to such formulations represented by Lewin's three "behavorial" modes of conflict and conflict resolution. It would, in other words, have to relate formulations with respect to the direction of gross action within situations of cognitive imbalance to cognitive adjustments similarly motivated by the need to reduce disequilibrium. But, more important still, it would have to focus explicitly upon the second general issue raised earlier with respect to the formation of cognitive structure: it would have to deal explicitly with the experiential processes through which the capacity for structural differentiation and delay, the capacity for more discriminant response and involvement with less investment of energy, is acquired. At present it would appear that the paradigm of purposive action is "subject to the restraint of structure" as manifested in the behavior of the person at one point in time (cf. Tiedeman, 1964, p. 13).

B. Economic Models (Entrepreneurial Behavior)

One possible strategy for focusing more explicitly upon those aspects of cognition that precede the making of decisions, rather than focusing upon those aspects which follow the making of decisions is, as Bruner points out (1957), represented by the models of decision making which have been formulated by recent economic thought as influenced in particular by modern game theory. Certain aspects of this approach to decision making are entailed by Fletcher's notion of entrepreneurial behavior and perhaps suggest a potential resource for extending Tiedeman's paradigm of purposeful action beyond the issues outlined above.

Within economic theory the "entrepreneur is the person who holds the residual equity in any business venture or transaction, the person who, presumably, controls the decision matrix of the essential operational units within that transaction" (Simon, 1963). In Fletcher's model of collaborative action all participants become stockholders, all, that is, have their appropriate measure of involvement and risk-bearing in the structure of decision processes.

Within classical economic theory the "utility function" is a fundamental postulate which requires that for all participants to any economic venture there can be specified a set of categorical preferences within the array of alternatives of action available. This postulate amounts to an implicit assumption of "rationality" with regard to the structure and the functioning of the system of interaction. The classical model of the utility function is further constrained by the assumption that the processes involved are limited to those of one or more participants choosing among _fixed_ and _known_ alternatives, that is, alternatives for which there can be specified a finite and stable set of consequences. However, more recent theoretical developments with regard to utility functions provide instead for mathematical formulation of the contingencies of choice behavior under conditions of uncertainty--formulations, in other words, of the various strategies which may obtain under specified conditions of risk--assuming, again, the principle of rationality (_ibid_.). It is this specific orientation with respect to the structure of discriminant risk-taking behavior which appears most relevant to the need within the Tiedeman-Field paradigm for a more explicit formulation of the antecedent organization of decision processes.*

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*In outlining his general position as an effort to provide means for considering the origins of both choice and purpose, Field argued for the need to focus upon an individual's current experiencing style as the crucial determinant (1962). His operational strategy for focusing upon these antecedents or origins of both choice and purpose was, however, to reconstruct them as they are "reflected in the manifest effects of style upon the choice of actions in known situations." This strategy, we feel, entails a logical puzzle which is reflected also in the general paradigm of purposeful action. We feel, in addition, that both the logical as well as the practical difficulties which such a strategy entails can be avoided by developing investigative techniques which, rather than attempting to "reconstruct" antecedents, gets the decision processes themselves "outside" in a form which shall enable us to more explicitly determine their attributes and determinants.

C. Information Processing and Linguistic Models

We assume that a cognitive process represents a means "whereby a person achieves, retains, and transforms information." (Bruner et. al., 1956). We assume, further, that the need for an elaborated structure of such means for coping with diversity is essential to organized functioning since the world of information (the potentially discriminant attributes of experience) appears infinitely complex, while our capacity to handle discrete bits of information within the normal constraints of experience is meager indeed (Miller, 1956). We assume, in addition, that such structured means, while presuming "specie-specific" substrates of a biological nature (Lenneberg, 1964), are acquired through a process of successive encounters and partial approximations. We assume, in other words, that such a capacity for dealing with potential diversity in a discriminating and organized manner is learned. We assume, finally, three primary issues with respect to such structures: (1) the principle of their organization, (2) the processes of elaboration through which they emerge as stable acquisitions from previously less differentiated, less integrated patterns of behavior, and (3) the functional stability or relative autonomy of such adaptive capacities as a subtle and dynamic balance between the "sensory" input of the internal, personal system and that of the external environment.

Our strategies for reducing the infinite complexity of potential experience to a workable structure (our styles of coding behavior) appear analogous to a process of coding and recoding by means of which potentially descriminably different attributes or sensations are rendered functionally equivalent. We define a coding system as "a set of contingently related, nonspecific categories" (Bruner, 1957, p. 46) and are led to conclude that reliance upon such generic coding strategies places us beyond the evidence (or beyond the information) which comprises any specific act of discrimination in at least two important regards. First, our generic coding system enables us to go beyond the evidence of the immediate occasion in the sense that we "ignore" (actually remain entirely unaware of) potentially discriminable attributes of that situation in favor of others. (Such "functional" selectivity can be accounted for only by recourse to more "distal" dimensions of organismic transaction with attributes of internal structure and with the ecological structure of the more general environmental history of that organism.) Second, we go beyond the evidence or information of the immediate situation in that we necessarily assign attributes of that immediate occasion to generic systems of implication on the basis of partial cues regarding the criteria which determine our generic code. In brief, while we realize that one swallow doesn't make a summer, we continually act upon reduced cues and only partial evidence. Our ability to re-code the discriminable attributes of the immediate occasion enables us to "read-off" the additional attributes of the immediate occasion as they are entailed by our generic code; i.e., we continually make inferences upon the basis of "what goes with what." Finally, our codes can themselves be re-coded into more generic form thus enabling us increased mastery over lower-order regularities implicit to each level of such a hierarchical system of integration. We remember and make continuing use of a formulation while the processes through which such a reduction of complexity was attained drop out of sight.

While our effort to provide a preliminary sketch of the issues implicit to any general formulation of the complexities of behavior as a hierarchical structure of integrated processes has focused on the perceptual or the "afferent" dimension, the "efferent" or overtly instrumental dimension would appear to entail analogous complexities (cf. Lashley, 1951). Thus, for example, the complexities of "nested interdependencies" through which we generate an articulate conversation (the grammar of our connected speech patterns) presumes a "serial ordering of behavior" analogous to that information processing model by means of which our speech is perceived and understood. As George Miller and Chomsky (1963) point out, "it is probably no accident that a theory of grammatical structure can be so readily and naturally generalized as a schema for theories of other kinds of complicated human behavior" (p. 488).

D. Probabilistic Functionalism

If we presume that the capacity for purposive behavior is a function of the adaptive strategies that are acquired in the process of sorting experience into significant classes of events (strategies attained for insuring order), what tentative dimensions of such developmental strategies might we outline in order to direct our own efforts to explore such behavior? Several possibilities come to mind--particularly as suggested by the work of Bruner and colleagues (1956):

a) We might begin with the presumption that such strategies represent a second or a third or a higher order of pattern characterizing the sequence of successive decisions involved in attaining reliable systems of categorization. We might begin, that is, with the presumption that such strategies can only be inferred from the manifest pattern or "style" of an individual's decision processes.

b) We might assume, in addition, that the pattern of such decision processes might be further characterized as, in part, determined by the effort (implicit or no) to ensure certain forms of outcome and to insure against others. Among such formal attributes of adaptative behavior we might tentatively list the following:

1)those dimensions of strategy committed to the most _efficient_ attainment of goal (those which reflect an investment in insuring the minimum expenditure of time, effort, or other resource)

2)those dimensions of strategy committed to insuring the _certainty_ of goal attainment*

3)those committed to the retention and/or elaboration of _favored_ _means_ _structures_.

The above are, obviously, suggestive rather than exhaustive; additional dimensions of analysis might include:

c) a number of tentative operational questions to guide our inferences with respect to the pattern of decisions implicit to actions which represent such strategies of coping behavior; for example:

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*Goal attainment might be further differentiated here as including at least two important alternatives: (1) the maximizing of utility, or commitment of strategy to attaining the highest return and (2) a "minimax" strategy designed to insure the smallest possible loss under the least favorable conditions.

1) What modalities or criteria of attribute adequacy are the preferred bases of discrimination?

2) What generic pattern of hypotheses does a sequence of such discriminations entail; e.g.: random contingency, conjunctive association, disjunctive association, functional association or other...?

3) How is that sequence of discriminations and the generic order implicit to it modified in the face of altered contingencies of goal, task, available information, anticipated modes of validation, and the consequences of specific moves? (What, in other words, are the functional relationships that obtain between strategies of coping behavior and the changing contingencies of the situation within which these strategies are elaborated and with which they are designed to cope?)

In general we might conceptualize the functional determinants of such strategies by means of four dimensions.

1) the personal and objective definition of the immediate situation: the CE and CD dimension of Tiedeman and Field's paradigm

2) the nature and the order of subsequent occasions encountered

3) the nature of validation (how one learns)

4) the consequences of validation (what one learns)

The above efforts to sketch the formal or abstract dimensions of such stylistic consistencies which characterize adaptive behavior presume that the rules of the game to which one's strategic resources are committed provide for a theoretical certainty of attainment. They presume, in other words, a game the rules of which are that if we play well enough and long enough we shall surely win. In actuality, the situation within which our more typically human strategies are acquired and deployed is a bit more complicated than that. Several orders of indeterminacy appear more characteristic of the typical decision matrix within which purposeful action is risked. In fact, one of the more subtle strategies which we might anticipate is that the rules of the game are changing by virtue of our efforts to discover those rules. For while it may be true (as Einstein apparently found it indispensable to assume) that nature does not play dice with us, the strategies of those whose behavior we seek to specify may well be modified in a systematic way by our efforts to impose upon them our own curiosities. Those strategies may, that is, include strategic resources for systematically protecting themselves against scientific invasions of privacy).

The perspective which we would urge with regard to purposeful action or entrepreneurial behavior is that it can most profitably be investigated as a specific mode of coping strategy. A more generalized analysis of the structure of such strategies of attainment or adaptation would, we contend, require the following assumptions:

1) The principle of organization or structure of decision processes which the behavior of a person manifests in the differentiation of any specific occasion of experience represents his "best bet" as to the functional attributes of that occasion. The critical attributes of that organized present occasion are functional in the sense that they represent tacit hypotheses regarding

resources and liabilities that are represented for the future as anticipated by virtue of the past that has been known. A decision as to technique for coping with the complexities of the immediate occasion, the principle of organization represents an implicit hypothesis and prediction regarding the link between that occasion and the future, again as informed by the past.

2) Because of the several orders of indeterminacy inherent in any immediate occasion of experience, such principles of organization or strategies of coping behavior represent, at best, efforts to attain maximum "probabilistic functionalism."* Because of this indeterminacy of the immediate occasion and the related probabilistic nature of such strategies, the formal attributes of purposive behavior emerge only through a process or sequence of encounters and progressive adaptations. The pattern of such stylistic dimensions of behavior consists of the sequence or elaborating processes of those coping efforts. Therefore, our research strategy must involve not merely an effort to reconstruct those process dimensions on the basis of a single complex of responses to an immediate occasion, nor must they consist merely of an effort to extrapolate from such essentially cross-sectional analyses to offer predictions as to the consistency of such stylistic dimensions within the contingencies of an evolving future. Instead, appropriate

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*We are here using "probabilistic functionalism" in the sense developed by Egon Brunswik (1939,1952; see also Postman and Tolman, 1959). While our immediate consideration of Brunswik's ideas was originally stimulated primarily by the work of Bruner and colleagues, we are also intrigued by the exploration of an equally "probabilistic" dimension of cognitive theory which Sarbin and colleagues have published (Sarbin et. al., 1960).

research strategies must facilitate our efforts to specify the functional determinants of an actual and extended sequence of such decision processes. In brief, to understand how a person copes with the varying pattern of indeterminacy or risk-taking inherent to a potential array of vocational situations, we should have to focus upon the actual procedures which characterize his efforts to order (a) comparable dimensions of his immediate situation, or (b) an experimental situation ecologically comparable to the functional attributes of an array of vocational situations which we might anticipate for him.

3) Those strategies which characterize any individual's resources for adaptive behavior within a specified sequence of occasions may be characterized as the serial order of decision processes with regard to a variety of potentially crucial determinants including, for example, (a) the need to maximize information to be attained within the immediate occasion, (b) the need to reduce that information to secure and manageable proportion, (c) the need to insure against risk of resources, (d) the need to exercise and elaborate favored means structures, (e) the need to attain favorable occasions of validation.

In summary of the above discussion we might emphasize that some further specification of the "mechanism of organization" (the structure of decision processes) presumed by a theory of career development as self-determination within the collaborative context of commitment to vocation is contingent upon our ability to elaborate the probabilistic dimensions of strategies of adaptation in at least three important regards. First of all, the structure of such strategies or decision processes can only be further specified by means of an investigative procedure which shall focus explicitly upon a sequence of behaviors from which those stylistic consistencies can be inferred. What is required is an empirical basis for describing an extended sequence of choice behaviors specifically with regard to strategies for coping with relevant dimensions of informational diversity, cognitive strain, contingencies of validation, risk of delay, error or failure--all crucial attributes of both the "currently experienced" and the "currently desired." In the second place, what is required is an operational procedure for actually getting such coping strategies out where we can systematically describe them in terms of both their objectives and the sequence of steps taken to achieve those objectives. Finally, we need more adequate specification of the procedures by means of which to describe the flexibility of such coping strategies as functionally related to the variable contingencies of information, capacity, risk, and reward. A more adequate "ecology" of the elaboration of self in vocational situation will in other words, require a more specific capacity to demonstrate the effect of relevant conditions of information upon specifiable aspects of such coping strategies.

Vocational-technical education and functional analysis of behavioral systems. In this section of commentary we shall consider three areas of discussion: (a) an introductory statement with regard to the impact that technological revolutions and a rapidly changing world of work have upon vocational-technical education and occupational analysis and classification, (b) functional occupational analysis and classification as an approach to the more stable dimensions of perspective within such a rapidly changing world of work and (c) a more general discussion with regard to "function" and "structure" and "dynamic systems of interaction" within the behavioral sciences.

A. Introduction: The Newton Project in Vocational-Technical Education.

The world of work changes rapidly in our industrialized society, as it must in any society based upon the continuing developments of modern technology. Both Tiedeman and Fletcher are vitally concerned with the impact that this rapid change has upon the link between person and work.

They are both concerned with the effort to specify the nature of this rapidly changing link in ways which shall materially facilitate the development of more adequate programs of vocational education for youth.

The Newton Project which Fletcher directs, like the Vocational Education Act of 1963, represents a pilot response to an immediate and serious educational need. Newton is in the process of attempting to cope more realistically with an increasingly compelling body of evidence to the effect that in Newton, as throughout the nation , the relevance of secondary education is limited primarily to the needs of that proportion of students which shall enter and complete a four-year academic college program.*

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*a) In a community such as Newton the proportion of students for whom the traditional academic college preparatory program proves inappropriate is considerably less than it is for the nation as a whole. The educational leadership in Newton recognizes, however, that a serious situation exists for any educational system in which even one student is, However, in Newton, as elsewhere, most recent efforts to improve the level of secondary education have focused primarily upon this academic sector, have raised the academic expectations and requirements for all with respect to it, and have, as a result, removed the central validity of secondary education even further from the needs (from the realitites of potential vocational opportunity) of an increasingly large number of high school age youth. Furthermore, existing programs designed to provide more practical technical and vocational training for those students for whom such an educational alternative is both appropriate and necessary are, unfortunately, based for the most part upon patterns of economic and social structure almost forty years out-of-date. Few, if any, such efforts are based upon the immediate or anticipated realities of our modern technological industrial society.

The Newton Project, like the recent federal legislation, is based upon the premise that the nature of the relationship between a person and his work role is in the process of being radically altered by the technological revolutions upon which our industrial employment

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by the very objectives and organization of that program, deprived of an educational opportunity appropriate to his particular needs. Therefore, in light of the character of the immediate and national need to develop programs of technical and vocational training more appropriate to the realities of a changing modern industrial economy, the leadership in Newton anticipates that its efforts may prove significant guidelines for educational innovation throughout the country where issues that are similar in principle exist for a much greater proportion of the students served.

b) Whether the educational experiences required by the B.A. or B.S. represent an appropriate or necessary path to vocational maturity for all or even for a majority of those who seek or attain it is not conceded here as an established fact but rather as a matter of active debate, a matter which is, however, beyond the scope of the immediate discussion.

structure depends. Though the notion of change appears intrinsic to our popular view of economic and social reality, and is perhaps a central tenet of a democratic ideology, it appears that few today are actually prepared to understand or in a position to provide adequately for the accelerating change in the rate of change itself (Venn, 1964).

We may anticipate that this accelerating rate of change in the technological basis of our modern industrial structure shall have an increasingly important influence upon three dimensions of the link between men and their work: (1) the changing total pattern of vocational skills required and rewarded, (2) the "life expectancy" of specific occupational clusters within that total pattern of skills, and (3) the more general pattern of relationships between the role that an individual shall hold as a person at work and his other personal, familial, and social involvements.

Our responsibilities with respect to this changing order of magnitude in the complexity of the link between man and his work is further complicated by the fact that we must attempt to anticipate and provide adequately for these developments within the context or "constraints" of a democratic society. In other words, we must presume a wide array of contingencies potentially relevant to the specifics of any single link between an individual and his work role. We must anticipate, for example, that the various members of the industrial sector shall remain free to compete for the available talent and to exercise whatever influence they may command upon the educational structure to determine the future distribution of that talent. We must anticipate that the individual shall, in turn, "remain" free to bargain for a sequence of educational and occupational opportunities consistent with his individual resources and inclinations. These and similar facts of a democratic order will continue to increase the order of complexities of an already intricate relationship to be anticipated between men and work.

Despite the complexities involved, any effort to provide a program of vocational training and education more appropriate to the realities of our modern technological world must be based precisely upon our ability to anticipate in some reliable degree the specific nature of this rapidly changinging link between person and work. For without some such specification there would, first of all, appear to be no valid criteria for constructing a relevant curriculum. Furthermore, the ability to anticipate in some specific form the complexities of this changing link between person and work would appear crucial to any program which shall include direct assistance to students in their efforts to develop reliable patterns of individual choice, both within and beyond the immediate educational experience.

Indeed, a host of issues with respect to the anticipated relationships between man and his work, particularly as those relationships shall increasingly be determined by the impact of technology upon the industrial structure, are of crucial importance both to the instructional and to the counseling sectors of the educational enterprise. Those issues serve, furthermore, to focus the concern of school officers responsible for planning and directing programs such as that initiated by the Newton schools directly upon the work of researchers in the behavioral sciences who have addressed themselves most specifically to the present and probable nature of the relationship between person and occupation. If, as has been contended, "technology has created a new relationship between man, his education, and his work, in which education is placed squarely between man and his work," (Venn, 1964, p. 1) what then, we must ask, are the available resources for specifying the "functional" aspects of that relationship and what are the relevant strategies for extending those resources to meet our immediate and anticipated educational needs? This is the question that Fletcher's immediate concern and responsibility poses for students of the world of work and of human career.

B. Functional Occupational Analysis and Classification

The development of information appropriate to the need to provide more effective programs of technical-vocational education requires a mode of occupational analysis which can integrate the major, complex variables associated with the rapid rate of change which we anticipate to be characteristic of the employment structure of the future. "Occupational analysis" commonly imples "a systematic method of obtaining information that is focused primarily on the tasks, positions, jobs, occupations, industries, and work environment in which persons are found..." (Shartle, 1964, p. 2856). In other words, occupational analyses and classification systems may be based upon one or more analytical dimensions: sociological, economic, industrial, and others. However, Tiedeman and O'Hara, and others, have suggested that were such analyses and classification systems to "focus upon the functional responsibilities of positions" we should perhaps be able to minimize the influence of variations in particular patterns of responsibility that define positions within a changing economy and industrial structure (1963d, p.73). In order to explore this possibility we shall offer here some interpretation of discussion and inquiry regarding functional approaches to occupational analysis and classification.

When we focus more explicitly upon the various usages of the term "functional" within this immediate context, we find several possible foci of analysis or implication. For example, some investigators suggest that those systems which focus upon *what* the employee does in any particular position, *how* he does it, and *why*, or *to what end*, are, thus,"functional" systems. This point of view would seem to reflect in part the influence of F.W.Taylor's ideas concerning the "functionalizing" of work (for an incisive critique of this tradition of "scientific management" see Bell, 1962). However, classification systems which are based upon an analysis of the "traits" of workers in particular jobs are frequently considered to be "functional" in at least two additional senses. First of all, they focus upon those human factors or worker requirements which have either an assumed or a demonstrated relationship to the specific requirements or attributes of successful performance on the job. In the second place, they frequently presume some further intent to integrate an analysis of such specific traits or job requirements with a more general conceptualization of the place that those traits and requirements hold within a total pattern of the personality and life of the particular worker, on the one hand, and the total industrial and social structure, on the other. The approaches of Roe (1956), Super (1957) and Bordin and colleagues (1963) represent examples of efforts to suggest conceptual bases for a more "functional" system of occupational classification in the first of these senses, an effort to reflect those "human factors" directly related (or otherwise demonstrably associated with) significant aspects of successful performance within specific occupational roles. Tiedeman and O'Hara's use of Erikson's psycho-social stages of development may perhaps be interpreted as a first approximation to the need for comparable attention to those functional dimensions of mutuality determined by broader historical and social realities.

To summarize, at least five distinct uses of the term "functional" emerge from such efforts to develop more adequate systems of occupational classification:

1) the specification of the behavioral requirements of particular positions--the critical attributes of successful performance

2) the establishment of empirical contingencies between two orders of events (a) those which are presumed to comprise the crucial aspects of successful performance within a particular position and (b) those which represent a discernible pattern of traits characteristic of those persons who do or who can perform successfully in that particular occupation.*

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*A mathematical function is simply a "correlation between two variables, called respectively the argument and the value of the function, such that whatever value be assigned to the 'argument of the function' the 'value of the function' is definitely (i.e. uniquely) determined" (Whitehead, 1948, pp. 107-108).

In the case of (a) the order of events presumed to comprise

3) the effort to determine individual worker traits not merely as indices of present or potential performance in a specified occupational role or roles, but, in addition, as representative of integral aspects of a total system of patterned behavior and expectation, as expressive of a person's identity.*

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successful performance might, for example, include the bases (either implicit or explicit, or both) upon which individuals are originally placed in criterion groups for which distinctive patterns of traits are subsequently obtained.

*Some of the difficulties inherent to the effort to develop more adequate functional occupational classification systems have been noted by Shartle (1964, p. 306):

1. Certain employee entrance standards which may express minimum qualifications, optimal qualifications, or a combination of the two, are not considered. Such standards may reflect unseen, unpublished and yet actual restrictive requirements of race, national origin, age, sex, and social conformity.

2. The requirements for jobs are flexible and are relative to the supply of applicants. In a recession, educational requirements may be set unusually high as a means of reducing the number of applicants. In periods of labor shortage, entrance qualifications may be drastically lowered.

3. Technological change is so rapid and so pronounced that available published standards are often obsolete. Furthermore, the qualifications that appear in our occupational rating schemes are of a general nature and do not reflect the reality of local employment conditions.

4. Occupational classification systems based on worker characteristics often overemphasize entrance requirements. Many of the critical occupational adjustment problems which arise are "in house"...

In this connection we might note (as do Tiedeman and O'Hara) that Blau and colleagues offer a further use of the term "functional" by suggestion that with it we distinguish between those requirements of a position which are made explicit by the employer and those "non-functional" requirements which must be discovered by the prospective employee as he seeks the position (Tiedeman and O'Hara, 1963, p. 74; Blau _et al_., 1965).

4) the effort to specify the total array of "functional" responsibilities of positions--and, indeed, the total pattern of human involvements which comprise the economic sector of a society--as dynamic aspects or components of a social system.*

5) the effort, finally, to determine the dimensions of mutuality and of successive differentiation between the more personal or psychological aspects of such a perspective and the more collaborative and sociological aspects.

These five emerging dimensions of functional analysis appear to represent something of a progression both with respcet to the complexity of conceptualization which they entail and with respect to their ultimate importance for our more immediate and practical concerns. It would appear, however, that our efforts thus far to develop more "functional" dimensions of analysis regarding the occupational structure have been focused primarily upon the first two of the above, while little if any attention has been given to the last two. For example, in presenting a recent study of manpower needs in basic health services (an effort devoted to development of "functional criterion analysis" for studies of manpower problems) Levin and Martin (1963) state: "the fundamental assumption behind this study is that manpower questions of scarcity and quality cannot be determined realistically unless we have some knowledge of the basic dimensions along which fields of work differ and basic dimensions along which individuals differ and how these two are correlated." (p. 4) This contention represents in our view an extrapolation of the second dimension indicated above to meet the needs suggested by the fourth and fifth dimensions of functional analysis. The burden of the discussion and inquiry reported here emphasizes, on the other hand, that while such demonstrable correlations are perhaps necessary conditions for determining manpower questions of manpower distribution, they are not, alone, sufficient for a determination of those questions in light of a corresponding concern for the potentiality for personally determined career within the context of a changing social structure. The emphasis here is upon the original need to develop the conceptual and programmic resources for dealing with each of the above five dimensions. We are not fully prepared to cope with the demands or the opportunities that a rapidly changing economic and social structure represents. We are not, in other words, prepared to specify the person as an agent of structure in the development of his own career. In order, therefore, to report some of the preliminary discussion and inquiry with regard to the conceptual issues entailed by such a formidable intent, additional comments regarding "functional" systems are included.

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*Cf. Erikson's "...the application of the psychoanalytic instrument to the questions as to how man changes in his depth as he changes the expanses of his environment, and as to who is affected (and how deeply) by technological and ideological changes...these questions must await better formulations of the ego's relationship to work techniques, to the technological 'environment,' and to the prevalent division of labor." (1959, p. 159)

C. Structure, Function, and Dynamic Systems of Interaction in the Behavioral Sciences

1)General

When, in the behavioral or social sciences, we refer to a "functional" relationship or a "functional" analysis or a "functional" explanation, we seem to have recourse to an essentially biological analogy or organismic principle whereby the definitive attributes of a particular array of phenomena signify the contribution that that array makes (or is capable of making under appropriate circumstances) toward the maintenance or the development of some specified characteristic or condition in a larger system to which the array is assumed to belong (cf. Nagel, 1961, p. 525).

2) Psychological

"Functionalism" was the label coined by William James in order to emphasize the need for a psychology of the holistic, adaptative, and purposive dimensions of human behavior. James sought thus to emphasize the need for a psychology of mental operations not mental elements, a psychology of the fundamental utility of consciousness and behavior. (James, 1890; cf. Marx and Hillix, 1963, chapter 5 as secondary source.)

John Dewey elaborated a similar emphasis upon the functional dimensions of human behavior in his influential paper "The reflex arc concept in psychology" (1896). In this paper Dewey makes the following crucial points:

> The fact is that stimulus and response are not distinctions of existence, but teleological distinctions, that is, distinctions of function, or part played, with reference to reaching or maintaining an end. With respect to this teleological process, two stages should be discriminated...In one case, the relation represents an organization of means with reference to a comprehensive end. It represents an accomplished adaption...In these instances there is no question of consciousness of stimulus as stimulus, of response as response. There is simply a continuously ordered sequence of acts, all adapted in themselves and in the order of their sequence, to reach a certain objective end...

> But now take a child who, upon reaching for bright light...has sometimes had a delightful experience, sometimes found something good to eat and sometimes burned himself. Now the response is not only uncertain, but the stimulus is equally uncertain; one is uncertain only in so far as the other is.
>
> The sensation or conscious stimulus is not a thing or existence by itself; it is that phase of a coordination requiring attention because, by reason of the conflict within the coordination, it is uncertain how to complete it.
>
> In other words, sensation as stimulus does not mean any particular psychical existence. It means simply a function, and will have its value shift according to the special work requiring to be done.
>
> (Dewey, 1896, 1965, p. 261-3, 265)

3) Sociological-Anthropological

Radcliffe-Brown (1952) attributes the first systematic formulation of a concept of function applied to human societies and based upon an analogy between social life and organic life to Durkheim. He points out in his discussion that in Durkheim's original definition the "function" of a social institution consisted of the correspondence between that institution and the needs of the social organism (cf. Durkheim, 1893). In further elaborating this analogy, Radcliffe-Brown makes a distinction between a "structural" dimension of analysis and the "functional" dimension:

> An animal organism is an agglomeration of cells and interstitial fluids arranged in relation to one another not as an aggregate but as an integrated living whole...The system of relations by which these units are related is the organic structure...The structure is thus to be defined as a set of relations between entities...The process by which this structural continuity of the organism is maintained is called life. The life-processes consists of the activities and interactions of the constituent units of the organism...
>
> As the word function is here being used the life of an organism is conceived as the functioning of its structure. It is through and by the continuity of the functioning that the continuity of the structure is preserved. If we consider any recurrent part of the life-process,...its function is the part it plays in, the

> contribution it makes to, the life of the organism as a whole.
>
> To turn from organic life to social life...we can recognize the existence of a social structure. Individual human beings, the essential units of this instance, are connected by a definite set of social relations into an integrated whole. The continuity of the social structure, like that of an organic structure, is not destroyed by changes in the units...The continuity of structure is maintained by the process of social life, which consists of the activities and interactions of the individual human beings and of the organized groups into which they are united. The social life of the community is here defined as the functioning of the social structure. The function of any recurrent activity,...is the part it plays in the social life as a whole and therefore the contribution it makes to the maintenance of the structural continuity.
>
> (op. cit., pp. 178-180)

As Evans-Pritchard (1951) points out, the elaboration of such a "functional" approach in sociology and anthropology represented a reaction against the attempt to "explain" social institutions by reconstructing their origins or their past. It represented a reaction against the effort to explain what we know very little about on the basis of what we know even less about. The functional point of view was an effort on the part of anthropologists who were influenced particularly by Durkheim to emphasize that societies are natural systems of interdependent parts, each part serving in a complex of necessary relations to maintain the whole. In brief, it is the function of culture from this point of view to unite individual human beings into more or less stable systems of social structures. The emphasis advocated becomes, thus, not description, or classification, or reconstruction of social or cultural traits or artifacts, but instead an emphasis upon the prevailing patterns of social interdependence within the immediate context of human needs (cf. Malinowski, 1944).

Merton (1957) carefully reviews and analyzes the various uses of a functional approach in sociology as developed by Durkheim, Radcliffe-Brown, and Malinowski, as well as the formulations of a number of other students. On the basis of this analysis he develops a paradigm for functional analysis which emphasizes interpreting data by establishing their consequences to larger structures in which they are implicated (p. 47). It is impossible, however, to obtain any single formulation that shall suffice to express the particular emphases of the many various uses of the "functional approach," for as Merton observes in a footnote, "the literature commenting on the trend toward functionalism is almost as large and considerably more sprawling than the diverse scientific literatures exemplifying the trend" (p.47).

In formulating his general theory of social action Parsons suggests that one of the "bases of selective abstraction," or one of the dimensions of analysis is that of the distinction between structure and function. He then argues that "the concept of structure focuses upon those elements of the patterning of the system which may be regarded as independent of the lower-amplitude and shorter time-range fluctuations in the relation of the system to its external situation--(that) it thus designates the features of the system which can, in certain strategic respects, be treated as constants over certain ranges of variables in the behavior of other significant elements of the theoretical problem."

"The functional reference, on the other hand," (Parsons contends) "diverges from the structural in the 'dynamic' direction. Its primary theoretical significance is integrative; functional considerations relate to the problem of mediation between two fundamental sets of exigencies; those imposed by the relative constancy of 'giveness' of a structure, and those imposed by the giveness of the environing situation external to the system." And he concludes, "the functional categories of social systems concern, then, those features in terms of which systematically ordered modes of adjustment operate in the changing relations between a given set of patterns of institutionally established structure in the system and a given set of properties of the relevant environing systems." (Parsons, Shils, Naegele and Pitts, 1961, pp. 36-37)

4) Comment

The above statements are but representative of a large body of literature which views specific patterns of social interaction within the context of a general model of social structure. The conclusion which we suggest from such a preliminary review of these discussions is that the concern for a more "functional" analysis of occupations (the concern for a more "functional" system of classification for the occupational structure) entails complex theoretical issues quite similar to those raised with respect to our initial concern for a more adequate notion of the person as a potential agent of structure within career development. Indeed, we might suggest that similar issues are implicit to any scientific effort to conceptualize pattern or explanatory relationships between behavioral events. If we confine our curiosity with regard to event structure to the perspective provided by a model of inquiry represented by operant conditioning, some of these conceptual issues can indeed be regarded as irrelevant to our immediate inquiries. If we confine our curiosity to the perspective provided by a model of contingent covariation over time, other issues can, similarly, be regarded as beside the point. If our concern is for the attributes of worker performance which can be specified within the immediate context of the work role, then perhaps we can exclude from our immediate concern the impact that such patterned events have upon the more "distal" dimensions of event structure -- as, for example, a person's behavior "at home," "at play," etc. If we are concerned primarily for essentially modal patterns of relationship between person and society, then a "personality character and social structure" perspective [represented by the work of Riesman and and colleagues (1950), Erikson (1950) or Kardiner (1945)] enables us to answer some questions while ignoring others. If, however, we are concerned for a more highly differentiated model of analysis which shall enable us to focus upon the intricacies of the link between man and work while reflecting also the impact of the larger context of society and history, then we shall require further consideration of complex theoretical issues.

We shall have more to say with regard to the role that we see a discussion such as this playing in connection with that theoretical need. At the moment we would extend the basis of discussion by considering selected aspects of a more general context for discussion, those specifically with regard to the status of education and work today within the context of more general social and historical perspectives.

Education, Work, and Career within the Context of Social Structure and History.

A. Introduction

Discussion of the two paradigms which Tiedeman has developed in his move from a psychology of vocational behavior to a concept of personally determined career has included consideration of (1) psychological differentiation and event structure as general analytical constructs within the behavioral sciences, (2) the notions of purposeful action and entrepreneurial behavior as specific modes of adaptation or "probabilistic functionalism," and (3) vocational-technical education and "functional" analysis of behavioral systems. Discussion and inquiry regarding the conceptual resources appropriate to a functional classification of the occupational structure led us to review the issues inherent in an effort to obtain a more general "systems" approach, one in which both worker function and occupational role could be seen in relation to the dynamics of personality organization and the analogous realities of a highly differentiated social system. These considerations lead us now to review discussion concerning the wide range of observation and difference of opinion that psychologists, sociologists, anthropologists, and humanists have had to offer with regard to modern man in his natural habitat -- with particular regard to the impact of school and work and social structure upon the lives and the careers of people. We conclude this section with some wide ranging speculations and gratuitous associations concerning the historical context of such psycho-social processes.

B. Observations on Social Discontinuities

1. "Growing Up Absurd" (with apologies to Paul Goodman)

If our perspective with regard to social structure and social change is broad enough, or if it is Olympian enough, we may perhaps conclude that "American society is in a sense...running a scheduled course (that) the broad features of the situation of American youth seem to accord with this pattern. (That perhaps)...there are many elements of strain, but on the whole they may be considered normal for this type of society...(that) in the case of the school, there is a markedly greater acceptance of the evaluation of good school work and its importance for the future." (Parsons, 1963, pp. 111-118, especially). If, however, we shift our perspective and "ask how young people themselves experience growing up in this changing society, a less hopeful picture emerges." (Keniston, 1963, p. 181). Indeed, there is considerable evidence as well as a general and growing feeling to the effect that the direction of social change is from commitment and enthusiasm to alienation and apathy (cf. Keniston, 1960, 1963). More specifically, it would seem that "an increasing number of young people -- students, teenagers, juvenile delinquents, and beats -- are alienated from their parents' conception of adulthood, disaffected from the main streams of traditional public life, and disaffiliated from many of the historical institutions of our society" (Keniston, 1963, p. 170).

Paul Goodman (1962) emphasizes that the usual response to such evidence on the part of most authorities and all public spokesmen is to assume that there has been a failure of "socialization." The question which Goodman would raise, and one which we must consider specifically with regard to any program of education or vocational training, is whether the social message has, after all, been received by the estranged and disaffiliated -- whether, as Goodman suggests, the message has not perhaps been received clearly and found unacceptable.

But what, more specifically, is the burden of this "message," as it is transmitted by the schools and, further, what are some of the salient characteristics of the response to that message:

> The child learns...that he should be punctual, write legibly, not waste paper, and be quiet when the teacher is speaking...that he should take turns and play fairly... that he is expected to, and actually does, experience loyalty to his school and solidarity with other students. And finally, of course, through grades, promotions, and awards, and the approval that comes from doing well (he) learns the value of scholastic achievement and success. At least, that is the expectation...
>
> Elkin, 1960, pp. 59-60

> The classroom and the playing field alike are places where you try to make it, and learn the techniques for making it that alienate you least from your peers. The overall rules are the same in both: learn the ropes; don't get hung up; always be friendly, sincere, and creative. And win! ... The important thing about this familiar picture is that it is a picture of a totally instrumental institution...
>
> Friedenberg, 1963, p. 494

> ...the younsters who drop out are probably, in many ways, a more promising moral resource than those who stay in... they are driven out in part by moral revolution from the middle-class life of the school...They imagine they dislike morality and have never been allowed to realize that they have morals of their own. They don't have a complete moral system, because they are not systematic; they are unprincipled in their behavior because principles are too abstract for them to handle. But in a concrete situation they can be trusted more safely than their middle-class peers who are trying to make it.
>
> _Op_. _cit_., p. 498

What Friedenberg and Goodman and many others seem to be saying is that it is the role of a student to keep his teachers honest by confronting them with his own sense of honesty, of reality, and that an increasing number of youth today are finding their teachers unable, or unwilling, to face such a risk. The implication is, of course, that the "harmonious organization" to which the young are in many cases inadequately socialized is itself somehow seriously inadequate to human nature and need. The further implication, equally obvious and yet equally problematical, is, as Goodman argues, that in such a situation better efforts or better techniques of "socialization" become not merely beside the point but actually a human and social problem in themselves. In such a situation the real issue to be confronted would be, instead, that of a need to change the very structure of the society and the cultural goals upon which it must depend.*

In any event, it would appear that the growing disaffection of youth with adult conceptions of adulthood, traditional roles of public life, and major historical institutions of our society cannot be explained away on the basis of socio-economic conditions which deprive the disadvantaged from the full benefits of the central sectors of the social system. That growing alienation includes representatives from all strata and sectors. Nor can it be explained away on the basis of an intellectual capacity inadequate to the demands and the rewards of our improving academic institutions, for it includes too many Mario Savios, too many Michael Rossmans, too many "Inburns" (cf. Wolin and Schaar, 1965; Keniston, 1963).

Few if any of the major efforts to re-mobilize, re-educate, or retrain youth to the demands of our technological world have been planned on the assumption that we need the help of those youth whom we would serve with such efforts if we are to determine what the best strategies might be. We wonder why. However, we might also wonder about the level of confidence, the level of commitment and reward which characterized the lives of those who are at present sharing the advantages of a job within that system.

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*As Bettleheim (1963) points out, "if the amount of discussion were indicative, then all or nearly all problems of youth would appear to be those of the adolescent male." Indeed, the issues concerning "growing up female" are no less complex and are now receiving a more active (or at least a more articulate) consideration (cf. Erikson, 1964).

While we have made some effort to consider the response of youth to the opportunities and the rewards of the adult roles available to them, we must also consider the personal responses of those adults themselves, their feelings and ideas with regard to the quality and the rewards of their lives.

We advocate a revised educational program, one more consistent with the anticipated vocational needs of a large majority of the high school population -- a majority which has in many cases never participated, never become involved, in that school and which includes a sizeable proportion that now withdraws physically as well just as soon as it is legally possible to do so. We are concerned with the social dynamite which such a situation represents. And with the sheer human waste. We assume that a more realistic program would serve to improve the situation. And yet, if the lives of many who have attained the integration with society that we would facilitate in others proves to be similarly estranged, inadequate and impoverished, then our efforts must surely fail of their larger intent. In order, therefore, to anticipate the true nature of the task which confronts us we must consider both evidence and opinion regarding the more general qualities of modern life as expressed by those who speak from a vantage point within the adult social structure.

2. Work and Its Discontents (with apologies to Daniel Bell)

It is assumed, not without compelling evidence, that work as presently defined by the structure of our society is for most people not merely an economic necessity but the vital key to one's personal sense of identity as well. If, for example, we look to see what happens to people who are counted out of the labor market -- the intermittently unemployed or the chronically unemployed (all growing segments of the population) -- we find that in most cases, these people suffer extreme social and personal isolation: "Half can name no close friends; half never visit neighbors; organizational memberships are rare..." (Wilinsky, 1964, p. 134) In other words, a man's employment may provide both the reality and the symbol of his place among the living of our particular social order. Yet when we inquire further with regard to the rewards of that "place among the living" or the "personal sense of identity" which steady work symbolizes, we find that in many instances, and indeed for perhaps a majority of people, the reality is tenuous and inadequate at best. The research issues are complex and still a matter of active debate. There is, however, substantial evidence to support the contention that anywhere from half to three quarters or more of those presently employed and thus presumably enjoying the fruits of their labor within the "instrumental activist" ethos of our modern industrial society simply do not feel that their work has personal meaning within the larger context of their lives (ibid).

> The plain truth is that factory work is degrading. It is degrading to any man who ever dreams of doing something worthwhile with his life; and it is about time we faced the fact.
>
> Sooner or later, if we want a decent society -- by which I do not mean a society glutted with commodities or one maintained in precarious equilibrium by over-buying and forced premature obsolescence -- we are going to have to come face to face with the problem of work. Apparently the Russians have committed themselves to the replenishment of their labor force through automatic recruitment of those intellectually incapable of keeping up with severe scholastic requirements in the public educational system. Apparently we, too, are heading in the same direction.

> If this is what we want, let's be honest enough to say so. If we conclude that there is nothing noble about repetitive work but that it is nevertheless good enough for the lower orders, let's say that, too, so we will at least know where we stand. But if we cling to the belief that other men are our brothers, not just Egyptians, or Israelis, or Hungarians, but all men, including millions of Americans who grind their lives away on an insane treadmill, then we will have to start thinking about how their work and their lives can be made meaningful.
>
> Harvey Swados, 1960, pp. 202-4

There are indeed sectors of the world of work which have been fragmented by the stopwatch of Mr. Frederick Taylor almost beyond the point of human repair.* But what of the opportunities and the rewards available to those who have somehow managed to attain a position within the world of work that is one or two notches above that of the industrial operatives? Does David Riesman (1950), or Hannah Arendt (1958), or C. W. Mills (1956), or William Whyte (1957) suggest that there is a more rewarding work experience available to those who can successfully aspire to positions within the "white collar" sector? It would seem not. Our conclusion is, rather, that any formulation of "career" which presumes the inevitability of the link between men and their work as that link is presently determined at any stratum by the present constraints of ideology and socio-economic structure precludes the capacity to illuminate essential personal and social resources for human commitment and social collaboration. It may well be, as Galbraith (1958) persuasively suggests, that the rewards of "an affluent society" remain contingent upon our ability to grasp a clearer view of the relation between events and the ideas which interpret them. We would, however, argue for an equal realization that clearly to perceive the discrepancy between the demands of the present and anticipated reality and the "conventional wisdom" is but the beginning of the puzzle. How to foster and mobilize "unconventional wisdom" becomes ultimately the more crucial concern. But in order to consider the possibilities of such a venture, it is necessary first to extend the immediate discussion regarding the discontents of work, to ask, more generally, what is the place of those discontents in the total life experience of modern man. Are there, in other words, any general indices of the quality of modern life, at least as it is viewed subjectively by those engaged in it, which are relevant to our efforts to see career in relation to society and culture?

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*Daniel Bell (1962) wryly observes that Taylor, who when he walked counted his steps to learn the most efficient stride and who was a victim all his life of insomnia and nightmares, delivered his first lectures to American engineers in 1895, the year that Freud and Breuer published their Studies in Hysteria (p. 232).

3. "The Lonely Crowd" (with apologies to David Riesman)

How do we take the measure of modern life? How do we gauge the subjective quality of that life as we experience it and as it is experienced and fashioned by our fellow men, those whose efforts to come to terms with the opportunities and the constraints of that life somehow embody whatever reality there is to our own efforts to formulate pattern and purpose? Do we ask for a national survey which shall interview 2460 of our fellow Americans "over age of twenty-one living at home, selected so as to be representative of the total population in such characteristics as age, sex, education, income, occupation, and place of residence?" (Gurin et al., 1960, p. xi) Or do we perhaps search more indirectly for our indications in the contemporary images of poetry, fiction, drama, and the fine arts? This latter strategy might seem inappropriate and misleading for all important art confronts us with those aspects of our condition which we would otherwise deny (cf. Algren, 1962; Southern et al., 1963). Nevertheless, we remain troubled perhaps by the import of Giacometti's emaciated and elongated figures wandering aimlessly past one another, without human contact. We are troubled perhaps by Mr. Camus' Meursault whose life was capable of generating but one hope -- that his end should attract a huge crowd of spectators. We think of Picasso's Guernica or Kafka's Castle, or Albee's Jerry and we are perhaps inclined to conclude, with William Barrett (1958) that, "the world pictured by the modern artist is, like the world meditated upon by the existential philosopher, a world where man is a stranger." (p. 43)

What do we find regarding the modern sensibility when we look at the general literature of a more explicitly psychological or sociological nature? We find, first of all, that the literature is extensive and rapidly growing to meet the demands of a self-conscious society. The very titles are not only suggestive but significant as well: _Man Alone_ (Josephson, 1962; _Identity and Anxiety_ (Stein, Vidich and White, 1960); _The Tower and the Abyss_ (Kahler, 1957); _Man's Search for Himself_ (May, 1953); _The Eclipse of Community_ (Stein, 1960); _Mirrors and Masks_ (Strauss, 1959); _On Shame and the Search for Identity_ (Lynd, 1958).

In brief, we find a vast literature suggesting that:

> This theme of the alienation of modern man runs through the literature and drama of two continents; it can be traced in the content as well as the form of modern art; it preoccupies theologians and philosophers, and to many psychologists and sociologists, it is the central problem of our time...In diverse language they say that man in modern industrial societies is rapidly becoming detached from nature, from his old gods, from the technology that has transformed his environment and now threatens to destroy it; from his work and its products, and from his leisure; from the complex social institutions that presum-

> ably serve but are more likely to manipulate him; from the community in which he lives; and above all from himself...
>
> Josephson, 1962, pp. 10-11

We find the contention, persuasively argued, that in our time the study of identity becomes as strategic as was the study of sexuality in Freud (Erikson, 1950, p. 242).

How do we come to terms with such contentions? How do we provide for them some frame of reference or analysis which shall enable us to evaluate them, to see them in relation to our more explicit and perhaps more immediate concerns with a theory of career development and the improvement of vocational-technical education and training? Do we simply ignore such contentions or presume that they are entirely exaggerated acerbities beside the point of our more immediate concerns? Do we thus perhaps advocate a notion of purposeful action or entrepreneurial behavior or formulation of "instrumental activism" which serves primarily as a defense against rather than an active confrontation and resolution of the context and substance of our modern sensibility?

We might begin the exploration of such issues by attempting to differentiate among the various sources and aspects of these broad contentions with respect to our human condition in the modern world, and among the various attitudes or responses to that condition which they entail. To that effort we now turn.

C. Alienation and Anomie: Divergent Perspectives on the Quest for Identity in Modern Society

1. Preliminary Differentiations: Sociological-Psychological

a) Sociological

In attempting to differentiate among the broad perspectives which sociologists provide with respect to the general conditions of social structure which characterize modern life (and which, therefore, represent the broad context of our more immediate concerns) we find two widely divergent points of view:

1) The "Equilibrium" Meliorists

On the one hand, we have theorists such as Parsons and Shils (Parsons _et_. _al_., 1961) whose perspective with regard to society is a codification and extension of the general structure-function model represented by Durkheim, Malinowski and Radcliffe-Brown. The emphasis of this theoretical perspective is upon the social structure as a system existing in a limited temporal perspective within which the various institutions operate as a "self-maintaining" system. The intent is to trace the various social processes within these institutional structures whereby any society manages to meet its integrative and adaptive needs. Such a perspective with regard to social structure assumes an equilibrium model and, as we have already seen, generates the feeling that "Our society on the whole seems to remain committed to its essential mandate." (Parsons, _op_. _cit_.; cf. Shils, 1963)

As we have seen from our earlier consideration of the general "structure-function" or "systems" viewpoint, this model entails several difficulties of a purely theoretical or logical nature. Those formal issues are not, however, our immediate concern here. Instead, we are more intent upon considering some of the critiques which have been offered with respect to the substance and the attitudinal commitments reflected by this "equilibrium" perspective, particularly as those criticisms have been made by other sociologists.

2) The "Activist" Dissenters

Perhaps the most incisive criticism of a substantive nature with regard to the "structure-function" model of social order is that from this point of view issues of social change and problems of social conflict tend to drop out of sight in favor of concentration on the "steady state" of the system. (cf. Inkeles, 1964, p. 37) According to its critics, the "equilibrium model" amounts to a support for the status quo. These critics contend that it represents an expression of an essentially conservative or bureaucratic imagination, one which obscures the fact that "far from being in a state of harmonious balance, most societies are usually experiencing conflict...(that) rather than consensus, the basic condition of social life is dissention, arising through the competition for power and advantage between the different groups" (op. cit., p. 38-39).

What Maurice Stein calls "the most potent attack against the intellectual quicksand of such 'system' thinking" was mounted by C. Wright Mills in his The Sociological Imagination (Mills, 1959). Mills' attack on this brand of academic sociology (which he renames "Grand Theorizing and Abstracted Empiricism") is based upon the contention that it represents an essentially technological instrument the use of which "has mainly been in and for nondemocratic areas of society -- a military establishment, a corporation, an advertising agency, an administrative division of government" (op. cit., pp. 14-15). Mills contends that ours is "a period and a society in which the enlargement and the centralization of the means of control, of power, now include quite widely the use of social science for whatever ends those in control of these means may assign to it" (op. cit., p. 116). And he concludes that the net result of the bureaucratization of the social sciences is that the structure of key decisions with regard to the future of our society are further removed from informed analysis and debate.

More specifically, Daniel Foss (1963) argues that Talcott Parsons, the leading exponent of the "equilibrium" model in social theory, submerges the individual beneath a bureaucratic world managed by the "Establishment." Foss argues, in fact, that Parsons simply does not care what an individual thinks, feels, or experiences as a result of living in the System...that he tends to eliminate from his analysis any consideration of conflict between subordinate and superordinate strata as a major motivating factor in social change...that, indeed, such conflict is almost defined out of existence (pp. 112-113). Foss contends that from this point of view any effort to seek substantive structural changes in society is discounted as "residual" while the effects of "strain" within the system as it is expressed in the lives of individuals are to be handled through psychotherapy. This, Foss concludes, amounts to a sociology of complacency and a failure to deal with the experiential reality of modern industrial society.

Thus we see that there is, indeed, an active body of dissent within modern social theory. Not only does the work of C. W. Mills, or Maurice Stein or David Riesman come to mind, but also that of Lewis Coser (1956), Herbert Marcuse (1964), or Anselm Strauss (1959).* Furthermore, we contend that any informed effort to come to terms with the concrete realities and the potentialities of modern social existence, any effort to develop more adequate understanding of the potentiality for personally determined careers or to provide more effective programs of technical and vocational education, can be improved by making more explicit the assumptions which it embodies with respect to the issues that these social theorists are debating. But before we can develop what amounts to no more than a first approximation to such an analysis we have to review some of the aspects of a similar debate which emerges from psychological thought today.

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*Additional critics of the modern scene whose incisive observations are relevant to the discussion include: James Baldwin (1963), John Pairman Brown (1962), Robert Lindner (1956), Kenneth Rexroth (1959), or Henry Miller (1945, 1957).

b) Psychological

David Riesman's image of The Lonely Crowd (1950) focuses upon the link between personality or character and social structure from the perspective of an array of assumptions that reflect those of Erich Fromm (1947). The work of both men represents an important link between images which are primarily sociological (in the sense that they focus upon the interpersonal systems of role behaviors and role expectations which comprise the basic interaction processes of any social structure) and images which are primarily psychological (in the sense that they focus upon the intrapersonal systems of controls and defense which integrate the various roles comprising the behavior of any one person into a stable and characteristic pattern). The work of Fromm serves, in addition, to clarify (by virtue of its contrast with more orthodox psychoanalytic positions) important psychological issues analogous to those debated by sociologists.

In a series of important and popular publications (1941, 1947, 1955, 1961) Fromm's central concern has, as Erick Friedenberg (1961) points out, been with "the social and psychological processes in human beings that destroy their productivity; and with the alternative ways in which people might grow if society gave them a fair chance..." (p. 307). The implication is, of course, that more favorable social arrangements are possible if we can but see clearly what the issues are. It is this point which distinguished Fromm's argument from that of those psychoanalysts who follow more directly Freud's original contention that social structure is but the collective expression of men's efforts to attain the gratification of their instinctual nature while accommodating and circumscribing if not entirely avoiding the pain which reality inflicts upon those same efforts (cf. Freud, 1930). As Friedenberg also points out, Freud "takes no position...as to whether the game is worth the candle; he merely points out that it cannot be played in the dark and the individual must pay what the candle costs (_op_. _cit_., p. 309). Fromm is more optimistic; he suggests the need for a distinction between individual neurosis as a failure to attain freedom, spontaneity, and a genuine expression of self and the phenomonon of socially patterned defect characterized by a similar failure on the part of most people within a social order, people who are not aware of their failure. Fromm, in other words, emphasizes the need to seek the roots of the failure that he sees in modern life in a sick society rather than attempting merely to treat individual patients who have become, and who shall continue to be victims of that society. Thus while he concedes that under certain social systems the opiates and techniques of coercion at the disposal of that society are perhaps more subtle and in any case more efficient than Karl Marx may have been able to imagine, Fromm remains (as Friedenberg contends) essentially Marxian in his final optimism while Freud remains essentially Hobbesian. It is this point of resemblance and conviction which relates Fromm directly to those sociologists who we have characterized above as the "activist dissenters."

There are differences too, of course. Harold Rosenberg (1959), whose intellectual versatility precludes our being able to label him conveniently as anything except just that, an intellectual, contends that the picture of modern man and modern society drawn by Riesman (and, thus, by implication, by Fromm as well) is a phantasy. He contends that "the grand metaphysical theme of alienation is, in fact, a projection of the fate that these social commentators have chosen for themselves." The "what to do about it" sections of their studies he holds to be "sermons for their milieu rather than challenges to history in the name of mankind." Rosenberg concludes that what is new in America is not the socially reflective person but the presence of a "self-conscious intellectual cast whose disillusionment has induced its members to volunteer for the part." Similarly, Walter Kaufmann suggests that "'Having been born in an unsettled society' -- to use Eliot's fine phrase --...need not entail any fatal damage (that)...'Having been born in an unsettled society' is a condition that Elijah and Jeremiah, Plato and Aristotle, Paul and the Buddha, Leonardo and Michelangelo, Shakespeare and Spinoza have in common" (Kaufmann, 1959, pp. 22-23). Kaufmann contends that while the modern world is a wasteland, great prophets and philosophers, poets and artists generally grow in unsettled societies, "on the brink of some abyss."

Herbert Marcuse (1962), on the other hand, raises a different issue. He argues that "either one defines 'personality' and 'individuality' within the established form of civilization, in which case their realization is for the vast majority tantamount to successful adjustment. Or one defines them in terms of their transcending content, including their socially denied potentialities beyond (and beneath) their actual existence; in this case, their realization would imply transgression, beyond the established form of civilization, to radically new modes of 'personality' and 'individuality' incompatible with the prevailing ones." (p. 235-6) Marcuse argues that today this later alternative would mean "'curing' the patient to become a rebel." Marcuse argues that the neo-Freudians or "revisionists" vacillate between these two alternatives -- that Fromm's critique of the "market-economy" and its ideology lead to no transvaluation of the values of productiveness but remain, in fact, precisely the values of that social structure which he criticizes. He contends that Freud's ability to see the basic inhumanity common to all the historical forms of society is denied to the revisionists by virtue of their mutilation of the instinctual basis of Freud's theory. He argues that, within the various historical frameworks of enslavement and destruction, even the liberties and the gratifications of Fromm's ideal would partake of the general suppression. Any alternative, any truly non-repressive mode of existence would, according to Marcuse, mean the subversion of the traditional culture, intellectual as well as material. And while pointing out that today psychological categories have become both political and philosophical categories, Marcuse argues for precisely the revolution that would attain such a non-repressive, eroticized civilization founded upon a new relation between human instincts and human reason.

The implications of this position for our theories of work, of play, and of human relations, are, literally, revolutionary.* It might well be that our responsibilities as serious students of career within the broad context of education, play, and human relations is to seek a more informed and usable awareness of such "joyful wisdom" than we have, say, of Nietzsche's(1960). In order to evaluate such a contention, however, we need to search out and to cultivate intellectual resources and perspectives which are not necessarily acquired along with our more traditional professional equipment as students of education and career development. And we are only human though-(as Dylan Thomas points out) we steadfastly refuse to believe it -- both time and energies are limited. To investigate this possibility means that we shall not be able to look into that. It means, in other words, that we need some basis for deciding which pattern of involvements and commitments appears the best risk for enabling us to ask the sorts of questions that shall prove to be most meaningful. It perhaps means, among other things, that, given our "process" or developmental perspective with respect to issues of purpose and of structure, we might seek some more historical outlook on precisely the puzzle of intellectual resources that confront us.

2. Further Differentiations: The Historical Perspective

Turning and turning in the widening gyre
The falcon cannot hear the falconer;

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*For a related and equally revolutionary discussion of our modern "repressive society and alternatives advocated see Norman Brown (1959); for a perceptive response to Brown see Eliseo Vivas (1961).

Things fall apart; the centre cannot hold;
Mere anarchy is loosed upon the world,
The blood-dimmed tide is loosed, and everywhere
The ceremony of innocence is drowned;
The best lack all conviction, while the worst
Are full of passionate intensity.
Yeats, "The Second Coming"

Commentary on our unwieldy subject (the quality and the resources of modern life within which we must attempt to define a human sense of career) comes to us through a wide variety of expressive modes; it is simple expedience which leads us to seek out certain of them at the expense of others. Within the two modes which we have discussed (the sociological and the psychological) two foci of issues are raised. In the case of the sociological perspective, the concept of anomie has become one of the crucial concerns (see Clinard, 1964). Within psychology and those mediating perspectives which focus upon the impact of social structure upon character and personality organization the concept of alienation emerges as equally crucial. Both of these contemporary foci can, we feel, be seen as emerging from a common historical context, one which can perhaps enable us to gain a better perspective with regard to the conceptual resources that either focus of concern represents for our more immediate theoretical and practical concerns.

Anomie or a general state of "normlessness" is in modern sociological theory defined as a state of serious discontinuity between the normative values which govern the behavior of a people (its culture) and the acceptable institutionalized means for reaching the goals implicit to those values (Merton, 1957). The selective impact that such a discontinuity between cultural ends and social means has upon the various members and sectors of a social system is sought as the basis for explaining a wide range of "deviant" behaviors, suicide, crime, delinquency, mental disorder, alcoholism and others. In addition, this formulation is used in order to explain a wide variety of behaviors which, while not characterized as explicit violations of the institutionalized expectations of a society, nevertheless represent responses which are to a serious degree constrained. (For example, the "bureaucratic virtuosity" which represents a perpetuation of institutionalized means in the absence of any informing cultural purpose or value.)

This particular development of the concept of anomia represents an elaboration of the original issue and point of view which Durkheim emphasized in his effort to provide a general analytical basis for understanding the impact that a rapid division of labor has upon the forms of social solidarity (Durkheim, 1893). In this work of Durkheim's we see many of our more immediate concerns within the broader context of social structure. For example, the general notion of a division of labor is formulated upon the basis that specialization of function is crucial to a reciprocal relationship and advantage among people and, thus, crucial to the foundation of an organic solidarity of the social system. The concept of "anomia" is, in turn, developed on the basis of three "abnormal" forms of the division of labor: (1) forced divisions wherein the distribution of occupations does not follow the distribution of talent, (2) divisions of labor which seriously fragment the functional activity of each worker and (3) "anomic" divisions resulting from a lack of integration of functions concomitant with the growth of industrialization, scientific technology, and the fragmented social relationships within urbanized styles of living.

Anomie thus refers to a property of a social system, not to the intrapsychic structure or subjective experience of any individual within that system. It remains, furthermore, a relative concept, the degree of anomie being in any situation "indicated by the extent to which there is a lack of consensus on norms judged to be legitimate." (Merton, 1964, p. 227)

Anomi*a* is the term that sociologists have adopted to denote the personal status of an individual within any social system who subjectively experiences a discontinuity between cultural goals and institutionalized means within that system. (As we have noted, psychologists generally refer to the subjective experience of such discontinuities by means of the concepts of alienation or estrangement.)

The notion that a person can perceive himself as one somehow apart from his social order, as either impotently estranged from that order or apart, while yet possessing the capacity for exerting an influence upon it -- this general notion is a reflection of a point of view which presumes the possibility of a discontinuity between the *actual* and the *desired* as a dimension of personal and social reality. For this reason it is our contention that an inquiry into the historical context within which such a point of view emerges can provide a resource for understanding more clearly many of the diverse trends in modern social and psychological theory -- trends which are highly relevant to our more immediate efforts to facilitate personally determined career patterns and improved programs of technical and vocational education. It would seem possible, for example, that the relationship between those "personologists" (to use Murray's term) who emphasize man's individual quest for an individual sense of being and those "activist" sociologists who emphasize the collective constraint upon a man's self determination and who in addition advocate more direct action toward that social structure, this relationship might be substantially clarified were we to trace the concept of "self-actualization" through the various expressions which it has received in the work of Maslow, Goldstein, Jung, and Hegel.

Thus, for example, Hegel construed "actualization" and "alienation" as metaphysical dimensions (1807); through the dialectical process of history the "Absolute Idea," estranged from itself in the antithetical state of nature, becomes actualized by virtue of a synthesis with absolute "Spirit." Man, as an agent within this historical dialectic seeks, according to Hegel, to actualize through a process of becoming his own spiritual being or essence from which he is estranged in his natural state. Thus for Hegel, Man's history is one of alienation from his true condition of being. It is a process through which he seeks to actualize that sense of being. It is, in brief, a process of becoming.*

As both Lewis Feuer (1963) and Daniel Bell (1962) have pointed out, Marx's original critique of Capitalism (as formulated in the _Economic and Philosophic Manuscripts_ of 1844) was based upon the contention that private property is the product, the inevitable result, of alienated labor. Marx's original contention was that a man alienated from his labor inevitably becomes alienated from his fellow men, from his own self, and from nature. Having taken what Hegel regarded as an ontological principle and interpreted it as an historical fact rooted in a particular system of social relations, Marx subsequently abandoned the concept of alienation in order to renounce the more diffuse Hegelian notions from which that concept had emerged. Thus, the struggle between classes became the primary focus and principle by means of which history was interpreted. Further elaboration of the concept of alienation was from this later perspective regarded as inappropriate, as a potentially vitiating influence upon the personal and collaborative resolve demanded for a proletarian revolution. The original concern for an "anthropology" or a discussion of the nature of man in which the alienation of man from his labor results in the more general estrangement from men, self, and nature, became an "economics" and an "ideology." The concern for selfhood and alienation was abandoned as inconsistent to the need for direct social action on the part of the oppressed masses.

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* For a highly suggestive study of Hegel's more general influence on the rise of social theory in the 19th century see Herbert Marcuse (1941).

In recent years, however, a number of social theorists have returned to the earlier doctrines of alienation in order to establish the basis for a renewed, a more humanistic reinterpretation of Marxian theory. As Bell points out, such a reinterpretation of the historical Marx is inappropriate. However, (as Bell also acknowledges) such an effort can represent an honest effort to provide the basis for a continuing and radical critique of society. Furthermore, such a tradition of radical dissent is substantially congruent with the critiques offered by the more psychologically oriented of our commentators regarding the quality of modern life. Such an emerging congruence of perspective and dissent between these two critical traditions would seem to be both appropriate and encouraging.

We have suggested one pattern of ideological divergence and subsequent convergence emerging from the tangle of Hegel's thought and influence -- that "dark continent of philosophy." We have suggested a continuity between aspects of recent social and psychological commentary on the quality of modern life on the one hand, and a liberal tradition of concern for the "human condition," on the other. There are, of course, other continuities which we might trace from the same source. The more obviously existential, for example: for, as Marx originally defined his own position in contrast to the work of Hegel by rooting the metaphysical dialectic in a social and economic order, so Kierkegaard defined his position by transforming Hegel's idealistic formulation of alienation into a religious issue, into a matter of personal spiritual conflict (cf. Kierkegaard, 1846). However, rather than tracing further the possibility of these important ideological continuities, we shall attempt to sketch in broad outline additional observations devoted to a general point of view from which to interpret the preoccupation with process, with time, with alienation and estrangement, with social structure and with selfhood, which we inherit from the Nineteenth Century, a preoccupation representing the context of historical sensibility within which our more immediate educational and scientific efforts are pursued.

Issues of selfhood or of personal identity appear to emerge as broad social concerns within specific historical contexts characterized by a balance of two elements. First of all, a previously undifferentiated assurance or level of awareness with regard to the relationship between person and people is rendered problematical by new challenges. In addition, the incentive to explore such a problematical situation expresses the implicit assumption that the indeterminate or problematical can be rendered less contingent -- that a people, both individually and in collaboration, can alter perspective with respect to events and that, in turn, such an altered point of view can serve to render events more consistent with human values and goals.

The emergence of the individual as a person with a sense of selfhood and of agency apart from a social or ecclesiastical order we generally recognize to have occured in modern western civilization during the period of the Renaissance and Reformation (cf. Bronowski and Mazlish, 1960). Thus, the word "individual," which during the Middle Ages meant "inseparable" and which implied a unit that could be defined only with respect to its membership in a class, was modified to the point where it implied attributes of uniqueness and particularity which culminated in John Locke's political and epistemological ideas.

Peckham (1962) traces three dimensions in this emergence of a new perspective or sense of agency with regard to man, society, and nature. There was, first of all, the "Platonic" assumption that the structure of the mind is congruent with the structure of a stable and enduring reality of ideas, the assumption that unaided human reason is capable of extending man's awareness and control to a broader and more enduring reality beyond the mere appearances which characterize informal experience. Second, there was the "Protestant" assumption that man's individual, personal sense of faith (or inner light) enables him to attain a direct relationship with the source of his spiritual being and renders irrelevant the mediations of an historical institution. Finally, there was the "Empirical" assumption that through his senses man is placed in direct contact with a natural order, an order which can provide the basis of both his capacity for scientific knowledge and his ability to modify personal, social, and natural events in light of informed human purposes. Descartes, Luther, and Bacon respectively represent perhaps the primary embodiments of these three distinct yet closely related expressions from which emerged the modern sense of individuality or selfhood.*

One or more of these three informing convictions appear to "substantiate" most of the intellectual, social, and personal explorations which characterize the Seventeenth and early part of the Eighteenth Centuries (cf. Whitehead, 1925). When, however, we come to the later part of the Eighteenth Century, and the Nineteenth Century particularly, it appears as though the traditional presumptions regarding selfhood and individuality had been rendered seriously problematical by fundamental challenges to all three of these underlying assumptions traced by Peckham. After Newton the "Protestant" assumption amounted in the minds of many, to a direct contact with an intricate piece of clockwork -- or, perhaps, to the original winding of the original clock. The "Platonic" or Cartesian assumption appeared to result in an intellectual bifurcation of man's nature in which the capacity for reason was without direct relationship to the capacity for either feeling or action. Finally, the Baconian or empirical conviction culminated in Hume's analytical demolition of both the theoretical grounds of the notion of physical causality and the philosophical basis of personal identity.*

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*Both Descartes and Luther have become the subjects of sensitive studies by psychoanalysts who trace relationships between the ideology of each man and aspects of personality structure manifested during a particular period of his life. Bertram Lewin (1958), for example, reflects upon Descartes' bifurcation of the universe into mind and extended matter on the basis of three dreams which Descartes reports for the night of November 10, 1619, while Erik Erikson (1958) illuminates both historical and personal dimensions of ideology in terms of a specific emotional crisis of later adolescence and early adulthood which Luther experienced.

The latter part of the Eighteenth Century and the entire Nineteenth we are inclined to view as a time when many very powerfully committed minds attempted, on the basis of individual thought, to re-discover an orientation which could sustain on new grounds the sense of self-hood and individuality which was their historical and cultural inheritance, an inheritance which had been rendered seriously problematical within the immediate context of scientific, social and philosophical assumptions. In response to a growing awareness of "cultural extremity" Wordsworth (1850) attempted to "strike through the mask of fancy" in order to attain a truly sustaining relationship with nature in all its generic power and substance. The "mind" was for Wordsworth (like Coleridge, 1817) to be conceived as not merely a reflective or mechanical imitation of a Newtonian universe but rather as an illuminating power in its own right; it was to be not merely a mirror of nature but a lamp as well (cf. Abrams, 1953). But Wordsworth's vision failed him as his own vernal heat cooled with age. Kant, on the other hand, (who was profoundly influenced by Rousseau but whose emotional power was transmitted more completely to a sustaining intellectual commitment) turned Hume's "empiricist" formulations upside down and asserted a philosophy of the mind as an organic principle, a principle which generates the very structure through which we know (1787). And Goethe (influenced in his later work by both Kant and Rousseau, but one who frequently found himself almost alone in his opposition to the Newtonian cosmology) conjured a Faust who having exhausted knowledge, and yet puzzled by the nature of the word, was tempted to attain by magic the understanding that eludes his reason. Faust, however, turns finally from the sun, reflects upon the rainbow, and, then, invisions the draining of a swamp!

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*Excerpts from Hume's Treatise (appendix) on "personal identity" (Hume, 1888, pp. 633-636).

When we talk of self or substance, we must have an idea annex'd to these terms...Every idea is deriv'd from preceding impressions; and we have no impression of self or substance, as something simple and individual...Whatever is distinct, is distinguishable; and whatever is distinguishable, is separable by the thought or imagination. All perceptions are distinct. They are, therefore, distinguishable, and separable, and may be conceive'd as separately existent, and may exist separately, without any contradiction or absurdity...

When I turn my reflection on myself, I never can perceive this self without some one or more perceptions; nor can I ever perceive any thing but the perceptions. 'Tis the composition of these, therefore, which forms the self.

...we have no idea of external substance, distinct from the ideas of particular qualityes...with regard to the mind...we have no notion of it, distinct from the particular perceptions.

...if perceptions are distinct existences, they form a whole only by being connected together. But no connections among distinct existences are ever discoverable by human understanding. We only feel a connection or determination of the thought, to pass from one object to another. It follows, therefore, that the thought alone finds personal identity, when reflecting on the train of past perceptions; that compose a mind, the ideas of them are felt to be connected together, and naturally introduce each other.

...But all my hopes vanish when I come to explain the principles, that unite our successive perceptions in our thought or consciousness.

In short there are two principles which I cannot render consistent; nor is it in my power to renounce either of them, viz. that all our distinct perceptions either inhere in something simple and individual, or did the mind perceive some real connection among them, there would be no difficulty in the case.

> For many millions I shall open spaces
> Where they, not safe but active-free, have dwelling places

In sum, we view this not so distant period of our own intellectual and spiritual history as one in which a sustained effort on the part of a remarkable number of very powerfully committed minds was made to assert that all truths are but "instruments," that the mind can create, as Nietzsche might say, only "weapons" with which to engage in the process of imposing meaning upon a void -- that "the true dialogue of the mind is not, as

Descartes or Spinoza thought, a form of rational or scientific elaboration of a dialectic," but is, rather, a process of personal and collaborative encounter. During this period we find original and powerful expressions of a growing realization that personal identity and social structures have no ultimate ground other than the historical immediacy of individual and collaborative encounters.

If such historical readings are accurate (which, we contend, is in large measure to say, if they prove to be fruitful ways of construing our present possibilities) then by means of them we have suggested a wider perspective from which to view the relationship between our immediate concern for the existential dimensions of self in vocational situation and our more general concerns for scientifically validated grounds of educational enterprise.

CHAPTER 9

CURRENT FINDINGS: PRECURSORS OF NEW DIRECTIONS*

Overview

During 1964-1965 Tiedeman for the first time had opportunity to work within the framework of the Center for Research in Careers, at the Harvard Graduate School of Education. This opportunity both brought him into more continual contact with the research associates and assistants of the Center and gave him reason to study at first hand the political restraints affecting career development, and its study. In this brief selection, Tiedeman describes with an immediacy of specific detail and sequence his experiences during that year. In addition, he includes a resume of his more theoretical activities of the same period, providing a crucial link with the material which follows in this and later chapters.

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*This chapter is based in part on a paper by David V. Tiedeman printed as "Career Patterns Studies: Current Findings with Possibilities", Harvard Studies in Career Development, Number 40, 1965.

Current Findings and Precursors of New Directions

1964-1965 Experiences. Two kinds of experiences occurred during 1964-1965 which gave focus to the directions which had been evolving in Tiedeman's thought about career development.

The first kind of experiences of importance for the directions now evident in Tiedeman's work came from the opportunity during the period to read Man in a World at Work (Borow, 1964). This volume contains a proposal by Crites (1964) for more specific investigation of the conception of vocational maturity, a conception which emerged in Crites' doctoral study under Super. This experience was strengthened by the opportunity he also had to read Gribbons' work on the index of vocational readiness (Gribbons, 1964, and Gribbons and Lohnes 1964 a and b, and two undated papers). Crites and Gribbons are defining a conception of central concern to the evolution of personal determination in career development, namely the conception of maturation in relation to the task of vocational choosing. However, it is evident from Crites' review (1965) of the monograph which O'Hara and Tiedeman prepared (Tiedeman and O'Hara, 1963) that Crites and Tiedeman have important differences in their conceptions of vocational maturity. Crites seemingly believes that vocational maturity must be defined only in terms of empirical observations. As Tiedeman previously noted in discussion of the paradigm which he finds useful in thinking of the science of the personally-determined career (Chapters 6 and 7), [illegible] believes that it is not only possible, but also necessary, to define vocational maturity in terms of an ideal a) which is presented to the person as information, and b) which the subject can then act towards in either a mature or an immature manner as the case may be. Tiedeman recognizes that he uses his conception of "maturity" _twice_ as he frames this premise. He uses the conception first as the ideal presented to the person and then as the criterion which he, _a second party_, imposes upon the person's present behavioral repertoire to assess whether it is now mature or not. Thus, for him, vocational maturity is an _interactional_ conception necessarily defined in relation to a person's response to others' expectations for the person's mature reaction. Crites (1964, 1965) writes as if the conception is _only_ empiric and other determined, not personal, but realized in an interpersonal context.

The second kind of experiences important for the directions now evident in Tiedeman's work came from the opportunity available during the period to converse with Mary Engel, Wallace Fletcher (see Chapter 8), David Moment, and Samuel Osipow who were the 1964-1965 research associates of the Center for Research in Careers. From conversations with these and other colleagues Tiedeman has come to more definite and better substantiated realizations that:

a) work activity involves the need for affiliation as well as the need for achievement and excellence (Engel, Moment, Osipow, and Roe);

b) work activity emerges during elementary and junior high schools, can be a force for binding the time of children who are otherwise not anchored in home life, and can be founded in reasonably complex justifications and understandings, even in children (Engel, Marsden, and Woodaman, 1965);

c) educational choice depends upon a different set of variables when college students are undecided than when they are decided (Osipow, Ashby, and Wall, 1965);

d) the theory of vocational development is largely presently grounded in educational choice rather than in vocational choice following upon initial employment (Moment);

e) work activity is set within organizational activity and involves the pursuit of total effectiveness through partial performances (see paper of that title by Moment, 1965); and

f) the personally-determined career can redound throughout the personality and, although it may not always be experienced in comfort, can be a powerful force in organizing a life of dignity, compassion, and even some joy (Baruch, Engel, Field, Friend, Landy, Matthews, Moment, O'Hara, Osipow, William Perry, Roe, and Robert White, 1963).

1964-1965 Politics and Career Development. The Center for Research in Careers provided opportunity for Tiedeman to learn in ways just noted for 1964-1965. However, his duties as Associate Director in that Center also required that he act. His actions provided another source of experience from which he learned about career development when he troubled to analyze that experience as follows.

The proposal for formation of a Center for Research in Careers called for creation of a Boston Advisory Committee. The Boston Advisory Committee was to be given the task of making study of the development of careers possible 1) by providing access to subjects and 2) by provision of intervening procedures arranged so that their effect upon the formation of careers can be tested.

Tiedeman first attempted organization of the Boston Advisory Committee early in the 1964-1965 academic year. He made his attempt in collaboration with James Doucette, a student on leave from Harvard who was then a ranking personnel officer in an industrial firm. Doucette and Tiedeman attempted to determine if Doucette could make the origination of a Boston Advisory Committee for the Center into a project which would complete his qualifications for the Degree of Doctor of Education.

Doucette's and Tiedeman's discussion of the potential organization and function of a Boston Advisory Committee in the Center brought them to understanding that numerous restraints determine the work of people in manners over which those persons have little or no control. The judgment of Doucette and Tiedeman was that many restraints are now being imposed to make the unit costs of production less and that the effect of that move will be to make access to livelihood available to fewer, and to different, people unless the returns of such savings are themselves rediverted through larger quantities of people than those now determined, and able, to monopolize those funds. People may well need to adapt to new exchanges of funds. However, it appears that new adaptations and exchanges of funds are now as important as new adaptations of people.

Doucette and Tiedeman could not find means of bringing the Boston Advisory Committee into being through exercise of responsibilities still compatible with Doucette's job. On the other hand, since Tiedeman had no means of making a career for Doucette in his Committee, Doucette decided to pursue his interests in ways different from the establishment of the Advisory Committee. This returned to Tiedeman the problem of forming a Boston Advisory Committee.

Tiedeman next turned to Richard Carle as his means of pursuing the interest of the Center for Research in Careers in having an Advisory Committee at work in career development for the Boston area. Carle was then Treasurer of the New England Community Development Council. While serving as Research Assistant in the Center for Research in Careers during 1964-1965, Carle prepared a report (1964) on the activities of that Council in promulgating personal involvement in community development. The report presents the theory and activities of the Council in considerable detail. The principle medium of the Council was advising on the investment of commercial mortgage money as somewhat augmented by personal loans from members of the Council. The Council had so far been successful in re-involving persons into their neighborhood through participation in the physical re-development of that neighborhood. The report once again attests that the provision of aid functions easier and better when provided for the expression of peoples' interests rather than for the framing of the interests of those people. In other words, when people are committed, it is relatively easy to facilitate goal pursuit; when people are not committed, formation and pursuit of goals is more difficult. The report does emphasize, however, that the formation of a community resolve for re-development can still be achieved from the outside with proper, judicious and wise administration and citizen involvement. Furthermore, the report presents a tentative theory for accomplishing this aim.

Carle's project involved the Center for Research in Careers in support of activity in the promulgation of mental health through personal investment in community. However, the project did not offer access to other developmental activity of more direct relevance to career development. Tiedeman therefore elected to pursue this latter interest through personal participation in a project which Ethel Beall was attempting to create first through the Boston University School of Continuing Education and later personally. The Beall project called for the social and economic rehabilitation of unemployed persons. The intention of the project was to organize a program of instruction in work, as well as personal and social skills, and to augment instruction with supervision and counseling as such could be arranged while the unemployed were given field experience in paid employment. *Two* (not just the usual one) field experiences were to have been arranged for each student before the person was to be considered ready to seek work on his own. The two experiences were considered necessary because experience in changes of jobs is the prime experience needed today in employment of the hard-core unemployed. The unemployed are quite *un*skilled in purposeful changing of jobs even though they engage themselves in job changes very frequently. (Roe and Baruch, 1964).

The Beall project proved to be a lesson in organization for programs in Guidance-in-Education. The project calls for cooperation of education, industry, and government. Education and industry must relate in order to turn opportunity for supervised experience of the unemployed into educational experience for them. Government must cooperate in such a new union of education and industry by allowing and facilitating new modes of accommodation between education and industry and by *greatly increasing the level of support* provided for the creation of employability among the employed as well as the presently unemployed.

The Beall project failed of sponsorship because we could not arrange the proper combination of the institutions of education, industry, and government. Education is restrained by its present subject, level, and geographical and political organizations. Industry is restrained both by its present expectation that education is not within its responsibility and by its fear of becoming overly committed to the unemployed by permitting them to have paid field experience in a company. Government is restrained by the fact that support is mostly categorical as required for the administration of authorizations provided by highly specific laws. For instance, support for the Beall project was to have involved participation of a) Federal, b) state, and c) local arms of the departments or sub-departments of 1) Education, 2) Labor, and 3) Welfare, nine potential interactions in all. It was not now possible in Boston for Beall and Tiedeman to find institutional location for the union of responsibility which would be required by the Beall project. This is a major reason why unemployment exists today in Boston and elsewhere. Society is just organized so that unemployment has to exist. Each institution expects the individual alone to solve the problem of his continual employment. The individual frequently finds that his society has more resources against him than he can himself marshal in order to secure participation in that society which is excluding him, however unintentionally.

At the present moment, a Boston Advisory Committee is not organized within the Center for Research in Careers. In addition, it is not now likely that such a Committee will be formed. The project

Tiedeman will describe later as epitomizing his new directions incorporates an advisory committee of persons on the Greater Boston scene. This group can lend its advice to the Center for Research in Careers as well as to the project. Furthermore, the University has founded a University Program on Technology and Society since the Center for Research in Careers originated. The University Program on Technology and Society has a distinguished group of industrialists serving in advisory relationship to the Program. It was then Tiedeman's hope that the Center for Research in Careers can have access to the advice of that body should the need for consultation appear more evident in the future. At the present time, the hope is fruitless because the Center for Research in Careers lacks needed finance.

Further Delineation of Central Mechanisms in the Personally-Determined Career. While Tiedeman was learning through conversation and action within the Center for Research in Careers, he took opportunity to further extend explicit representation of *three of the central mechanisms* of import to his consideration of the personally-determined career. As noted in Chapters 6 and 7 the conception of choos*ing* is now the primary conception in his evolving theory of the personally-determined career. His first approach to the conception of choosing was through the paradigm of differentiation and integration which was framed in collaboration with O'Hara (Tiedeman and O'Hara, 1963). The paradigm of differentiation and integration presumes aspects of A) anticipation and B) implementation with steps of 1) exploration, 2) crystallization, 3) choice, and 4) clarification indigenous to the aspect of anticipation and steps of 1) induction, 2) reformation, and

3) integration indigenous to the aspect of implementation (see Chapters 2 and 7).

Tiedeman's early presentation of the paradigm of differentiation and integration is restrained by present conceptions of behavioral sciences to the effect that events merely happen to persons and differentiation and integration then have opportunity to ensue. Actually, people also initiate events and cause consequences to ensue. (see Kehas, Chapter 3 and Field, Chapter 4) When such activity is personally-directed to some degree, it is purposeful. Field's and Tiedeman's introduction of the paradigm of purposeful action into the prior paradigm of differentiation and integration was a first step toward delineation of the linguistic frame needed in a theory of the personally-determined career. The step occurred by invoking the conception of discontinuity and analyzing the action of a person in relation to his approach and passage through a discontinuity (Tiedeman and Field, 1965). Unanalyzed in this original paper is the relation of discontinuity to continuity.

During 1964-1965, Tiedeman framed a statement of logical relations between continuity and discontinuity (Tiedeman, 1965 a). He elected to consider a discontinuity as being incorporated into continuity. He so elected because this is the sequence in which career develops, namely as the incorporation into general development of an identity lined out through the collaborative activities which are characterized as work. The analysis points to the fact that career development is not all thought; career development is the exercise of thought in work activities in ways such that action is somewhat guided by thought. However, action influences thought as well as the reverse. Such statements necessarily re-engage purposeful action into general differentiation and integration and permit analysis of neurotic purpose as well as normal purpose (Kubie, 1965, also see Chapter 11).

The mechanism of incorporation of discontinuity into continuity offers means to analyze the operation of purposeful action in differentiations and integrations relevant to the development of personally-determined careers. At the same time, the mechanism cries for simultaneous understanding of subsidiary mechanisms of commitment and tentativeness. Allport (1965) makes a general statement of the value of the conceptions of commitment and tentativeness to theory for Guidance-in-Education. During 1964-1965, Tiedeman was struck by the necessity of invoking the conceptions of commitment and tentativeness into the theory of the personally-determined career if the junior college, the lower level of higher education, was to be attributed a goal of dignity and necessity without incurring the wrath of those who believe that a "terminal education" is the end. He therefore wrote a paper on "Commitment and Tentativeness during Career Development at the Lower Level of Higher Education" (1965b). At the present time Tiedeman's conception of commitment and tentativeness is limited to that analysis of the processes as they can be enunciated and facilitated during the lower level of higher education. The concept is too key to be left in that condition, however. Commitment and tentativeness are primary aims of liberalization through education, of civilized living itself for that matter. The career as an expression of the mechanism of commitment and tentativeness must be brought into focus in relation to its import 1) on the freedom of society to change while accepting its citizens, and 2) on the interpenetration of work and non-work activities in the creation and maintenance of serenity and dignity.

Tiedeman's present and still largely just pre-conscious stirring of interest in commitment and tentativeness as mechanisms of purposeful action in the development of personally-determined careers was facilitated throughout 1964-1965 by close association with Wallace Fletcher, a research associate of the Center, and Gordon Dudley, our research assistant. Fletcher brought the conception of entrepreneurial, or risk-taking, behavior into focus for Tiedeman. Tiedeman had previously toyed (Tiedeman and O'Hara, 1963 and Tiedeman 1964a and 1965b) with the idea that an economic form of analysis was of use in developing a model of purposeful action. Fletcher and Dudley (Chapter 8) very much put this conception into focus through the provision of broader perspectives. Fletcher presently stipulates that the teaching of entrepreneurial behavior should be a prime goal in vocational education. He here uses the term in relation to the risk of monetary capital and personal effort in the potential gain of profit. However, Fletcher and Tiedeman find union of interests through analysis of the risks of effort, time, reputation, and self-regard in the evolution of the personally-determined career. Purposeful action in the personally-determined career is undertaken with the economies of time and effort as goals but with the risk of money, reputation, and self-regard.

The union of conceptions of Fletcher and Tiedeman has been greatly facilitated by Dudley's interest in creativity. He has been the person who has largely forged the union of entrepreneurial behavior in purposeful action through the conception of creativity. That collaboration made Tiedeman's prime target be the study of creativity.

CHAPTER 10

CREATIVITY AND CAREER*

Overview

Dudley's consideration of "purposeful behavior" in Chapter 8 invoked in particular the work of Bruner and colleagues (Bruner, et. al., 1956; Bruner, 1957). This emphasis upon somewhat operationally defined processes of cognitive strategy was adopted in order to elaborate Fletcher's position regarding "entrepreneurial behavior" vis-a-vis Tiedeman's work. Dudley subsequently turned, however, to a more direct consideration of the "non-cognitive" processes of imagination, personal knowledge and style of address which, in his view, appear especially significant to the development of career in stages of progressive exploration. In this chapter Dudley reviews his work on these issues under the heading of "creativity in career" a statement for which he suggests as an alternative title, "the vicissitudes of purposeful behavior."

This paper enables us to view Tiedeman's work from a somewhat different perspective vis-a-vis the fields of career research and dynamic psychology. It extends consideration of the "structure-process" issues first raised by Kehas and Field and reviewed in Chapter 8. It provides a preliminary but systematic discussion of theory regarding creativity, imagination, and symbolic processes of ego synthesis within the context of current issues in psychoanalytic meta-psychology. Finally, it outlines specific directions for further exploration of representative processes of imagination and "ego-synthesis" *in sitio*, within, that is, contexts of ordinary educational experience and purpose. It thus concludes by reiterating a specification for further work originally emphasized by Frank Field. (Chapter 4).

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* This chapter is based upon the Doctoral qualifying paper by Gordon A. Dudley entitled "Creativity and Career: A Discussion of the Role of Symbolic Processes of Ego Synthesis in the Psychology of Vocational Development."

From the Object of Vocational Choice to the Act of Personal Choosing

Current research in the psychology of career development gives increasing emphasis to the use of specific concepts from ego psychology (Borow, 1961). In the past few years the focus of career analysis has moved "from the object of vocational choice to the act of personal choosing" (Tiedeman, 1964). Accordingly, conceptual efforts and research strategies reflect an increasing emphasis upon "the development of cognitive structures which enable a person to engage in the exercise of initiative through work" (Tiedeman, 1964). One result of this emerging emphasis is that an increasing number of these investigators are attempting to focus their research specifically upon the relatively autonomous, quasi-permanent, personal "means structures" through which processes of psychological functioning integrate actualities of individual need and quest with the realities of a present and anticipated world of work. These investigators have thus begun to consider more explicitly a broad range of conceptual and methodological issues with respect to the nature and formation of cognitive structure and the organization of thought processes--issues which are currently of central interest to an increasing number of psychologists whose specific professional commitments reflect a wide variety of theoretical and practical concerns.

Within this context of emerging emphasis upon better conceptualizations of "ego" or "character" structures, we shall discuss the role that symbolic dimensions of imagination play in personality development and in the organization of thought processes. More specifically, we argue the thesis that man's distinctively human and potentially creative capacities of imagination represent symbolic processes of ego synthesis playing a crucial role in those dimensions of personality organization which psychologists seek to conceptualize as character structure. In other words, our discussion considers symbolic processes of ego synthesis as significant dimensions of mental activity of particular concern to a psychology of personally determined career patterns.

We shall first review a number of current conceptual issues and research strategies in the psychology of career development, with particular emphasis on those most relevant to more general issues regarding the development of "ego" or "cognitive" structures. Then we shall outline three important dimensions of conceptualization with respect to salient attributes of ego, character, and cognitive consistencies: (1) the formal attributes of psychological structure as a hierarchically organized system of control functions, (2) the dynamic relationship between such system principles and the various psychological processes whose functioning they direct, and (3) the organismic and environmental dimensions--the "ecological" aspects--of their relatively autonomous functioning.

From the perspective of psychoanalytic ego psychology, we shall then outline a conception of symbolic processes of imagination, emphasizing in particular their significance as crucial dimensions of ego strength or character structure. Here the discussion will depend for its organization upon a sequential patterning of relationships and relative emphasis among the various "metapsychological" points of view which, we shall suggest, characterizes in one useful way the development of psychoanalytic theory.

Finally we shall bring the several areas and levels of general discussion to bear upon their implication for a psychology of personally determined career patterns. Here we focus specifically upon wit, humor, and laughter as highly significant and readily observable dimensions of symbolic imagination in the service of ego synthesis. And thus, we conclude with a suggestion for further exploration of these dimensions of character structure as they become manifest within the specific context of an educational program designed to foster the career development of master teachers and counseling psychologists.

The Psychology of Career Development: An Overview of Conceptual Issues and Research Strategies

In order to relate the conceptual issues providing the central focus of this paper to those specific theoretical and methodological concerns which characterize the current state of research in the psychology of career development, we shall begin by reviewing briefly several examples of recent discussion and emphasis offered by generally acknowledged leaders in the field.

At the 1961 American Personnel and Guidance Association symposium devoted to current research in vocational development, Donald Super outlined what he perceived to be three unresolved issues. The first of these he outlined as "the problem of career prediction" (Super, 1961). Assuming that, "the aims of vocational psychology are synonymous with the aims of psychology in general (i.e., the prediction and control of behavior)", Super suggested that the problem of career prediction is significantly complicated by the new orientation which research in occupational behavior has taken. For whereas earlier the task was one of predicting from one point in time to another (a task for which multiple regression and multiple discriminate function techniques are appropriate) the task now becomes in his view, one of predicting from several points in time to a series of later points in time, since a career pattern emerges from a sequence of occupations, jobs, and positions which any given person is likely to occupy. In an effort to deal with this issue of "career prediction", Super sketched what he calls a "thematic-extrapolative" method, a method which represents an effort to bridge the gap between clinical and statistical approaches to prediction of behavior.

The second unresolved issue Super identified as the need for methods of analyzing exploratory vocational behavior; the third, the need for determining comparable measures of vocational maturity at different age levels.

Super's contribution to the 1962 APGA Research Symposium included an effort to provide a first formulation for the definition and measurement of early career behavior (Super, 1963). The rationale which he proposed was based on the assumption that use of a "career model" in vocational guidance presumes the possibility of developing criteria for determining the success with which people handle the vocational, developmental tasks characteristic of each of the various stages of career. He contended that, "The question with which we must start, when using developmental criteria of success, is that of the adequacy of the behavior manifest in coping with the developmental tasks of the stage of the career in which the subject finds himself." He suggested, in addition, that the required criteria include "external" or social indices of movement within the occupational ladder or lattice and "internal" or psychological indications of the meanings that such moves have for the individual making them.

In a more recent statement, Super recalls these three issues and remarks that, "To this list was added almost immediately, self concepts in vocational development" (Super, _et_. _al_., 1963, p. iv). Super observes in this regard that by 1951 "The conceptualization of occupational choice as the process of implementing the self concept began to bridge the gap between personality theory and vocational psychology" (_ibid_, p. 3).*

The process by which the self-concept influences vocational development is elaborated by Super as consisting of three major processes (1) formation, (2) translation and (3) implementation. The formation of the self concept he conceptualizes as evolving through five stages or phases: exploration, differentiation, identification, role-playing, and reality testing. Translation of the self concept into occupational terms appears to be construed by Super primarily as the externalization of a coherent and appropriate set of vocational role expectations. Implementation, in turn, appears to consist primarily of the subsequent reality-test of those internalized expectations.

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* Super was himself instrumental in making the transition from the "old" to the "new look" in the field of vocational behavior. This he did, as Tiedeman and others have acknowledged by introducing the person as an agent in the process of vocational choice and development. In giving initial expression to this new look, Super observed:

> Psychological hypotheses about vocational behavior have usually been couched in terms of individual differences between persons and groups and less frequently in terms of within-person changes over two or more occasions. It is likely to seem axiomatic to a psychologist studying problems of occupational choice and adjustment, however, that the act of choosing, whether work-related or otherwise, occurs within a person (Super, 1957, pp. 28-29).

In an effort to provide a series of definitions toward making the self concept operational, Super distinguishes first of all between self-percept, self-concept, and self-concept system, and (finally) vocational self concept. Next, in order to further specify the hierarchical organization of these definitions, Super outlines a conception of dimensions and metadimensions with respect to self concept and self concept system.

In sum, Super's work in the psychology of career development tends to give primary emphasis to five dimensions:

1. The centrality of the person as a structure of "internalized role expectations"
2. The value of theory as operational and explanatory
3. The emphasis on behavioral prediction
4. The interest in criteria of vocational maturity characteristic of or appropriate to each of the stages of the career pattern
5. Interests in specification of exploratory vocational behavior.

In an effort to specify the properties which mark the recent trends in occupational psychology and the emergent focus upon vocational development or career patterns, Borow (1961) emphasizes eight distinguishing characteristics of what he terms a "new look" in current research:

1. Emphasis on hypothetical constructs (or theory)
2. Use of psychodynamic formulations to account for developmental choices in terms of need structure

3. Use of specific concepts from ego psychology, (e.g., self-concept, identity formations, role models)

4. The assumption of a career pattern as an orderly and hence hypothetically predictable progression from position to position

5. Use of general developmental theory as an umbrella

6. Emphasis upon the specificity of vocational tasks with respect to identifiable life stages

7. Emphasis on the importance of early experience with respect to career development

8. Preference for longitudinal research design.

Borow holds that while such a series of descriptive principles cannot be exhaustive, it does serve to convey something of the spirit of the sharp break with traditional trait-and-factor orientation and strategies. He would, however, suggest that the break with the past is perhaps not yet sufficiently complete, indicating, in this regard, that the preoccupation with prediction (usually of occupational status) still plays too large a role. Finally, he suggests that in order to frame and test researchable questions about how youth grows up vocationally, there is required a new set of conceptual tools that are not part of the conventional intellectual and professional equipment of vocational psychologists. And he concludes, that in order to educate themselves toward those tools, workers in the field will have to learn to become more faithful to the logic of scientific inquiry.

Beilin (1963) has emphasized that the objective of current research in career development is to understand the process of vocational decision-making....He suggests that, "vocational decision-making involves a type of game in which the player is pitted against the economic and social opportunities available to him--with a whole set of kibitzers... feeding him information about how to play the game". He concludes that this implies that "the principal concern of vocational researchers should be on cognition...since a major part of the business of vocational decision-making involves the processing of information". He suggests, in addition, that such an emphasis is not incompatible with the implications of Havighurst's work...is consistent with Tiedeman's orientation, with George Kelley's theory of personal constructs, and with efforts to "establish some rapprochement between Piaget's theory and classical psychoanalysis and the ego psychology of Erikson". In conclusion Beilin urges that there be a shift of emphasis in vocational development research from the normative to a concern with psychological processes and mechanisms--particularly cognitive processes...and that there be a methodological shift from naturalistic observation to "at least a moderate amount of experimentation".

The work of Bordin and his associates represents an effort to provide a more articulated framework for vocational development through an application of psychoanalytic theory and the concept of work activity as a form of sublimation of needs, motivations, impulses, instincts.

This research (Bordin, et. al., 1963) introduces a general statement of the position which he and his associates have developed with a brief survey of formulations advocated by other researchers. He observes that beginning with Super's (1953) early paper there has been some discussion with respect to the relative advantages of focusing research on vocational choice or development...with Super and Tiedeman emphasizing development and Roe (1956, 1957) and Holland (1959) emphasizing choice. He suggests that the differences may be more apparent than real but that in any case the central theoretical issue would appear to be "the tenability of assuming that after certain maturation points have been reached the individual makes a vocational commitment which tends to be persevering". On this issue Bordin and his colleagues hold to the affirmative position. He suggests furthermore, that "all theories of occupational life take either one or both of two views of the individual, the "structural" and the "developmental": the structural view analysing occupations within some framework for conceiving personality organization, the developmental view attempting to portray the kind of shaping experiences that can account for personality organization and concomitant vocational pattern. In light of this distinction, Bordin suggests that both Super and Tiedeman use the term "self" as a developmental construct but that Tiedeman's version of self perception is "almost devoid of emotional and motivational influences" while Super "gives us no explicitly formulated developmental theory", he holds that in Super's formulation, "There is little treatment of the self as an active force with complex inner organization". The work of Ginzberg et. al., (1951) he views as "a process formulation with virtually no structural assumptions". And he states that while "both Holland and Roe strive for a more differentiated structural approach in which occupations are grouped according to personal characteristics or activities... Holland seems content to force occupations into particular classifications...while Roe's classification of occupations clings primarily to those that have arisen out of factor analysis of interest inventories... that although she acknowledges a debt to Maslow's hierarchical classification of needs, she makes little visible use of his stated needs in her classification system and her efforts to use this classification in connection with her theory of the early determinants of vocational choice suggests that she has only one personal dimension in mind, namely the degree of orientation towards persons or nonpersons.

Brayfield (1964) contends that the most salient characteristic of present day vocational counseling research is the ambitious attempt made to link research procedures and findings to theoretical formulations. In this regard, he refers specifically to the potential fruitfulness of formal decision theory, i.e.: "vocational choice perceived as occuring under conditions of uncertainty or risk with the individual assigning a reward value (utility) to alternative choices and appraising his chances of being able to realize each of them with the postulate that the individual will operate on subjective minimax-calculus". Brayfield points out that this approach has received interesting formulation in Hilton'sapplication of Festinger's theory of cognitive dissonance (Hilton, 1962). He cautions, however, that the development of vocational behavior theories may be somewhat premature as well as pretentious and that there are more effective ways of making progress and concludes that we need an intermediate strategy falling somewhere midway between crude empiricism and theory construction. This intermediate strategy he sees as one of developing a conceptual framework, the strategy of mapping the terrain in order to avoid getting lost in the underbrush of empiricism or stranded atop the lofty mountain of theory. In commenting on substantive issues, he observes that in order to reconcile the correlational and experimental traditions (Cronbach, 1957) fruitful use might be made of the distinction between "convergent" phenomena (those dealing with events which can be determined if we know the component causes) and "divergent" phenomena (those which are indeterminate in that they follow from a single event). In a somewhat caustic summary statement, Brayfield refers to the past twenty years in the field as the "heyday of self-concept and self-acceptance research", characterized by the reification of egocentric variables, and attributes this inappropriate emphasis to "the emergence and accendance of an interest in the sick and inadequate, as opposed to the original interest in the effective functioning human being in his most significant life role - the job or career".

Holland (1964) was responsible for providing the summary of major research programs on vocational behavior which appeared in the N.V.G.A. anniversary publication, Man in a World at Work (Borow, ed., 1964), a publication envisioned as representative of the profession's best current thinking. In this paper Holland reviews the work of Super, Tiedeman, Roe, Flanagan, and himself as representing the major programs of research and, in addition, comments briefly upon the work of Leona Tyler and Bordin. Each major program is reviewed in terms of origin, goals, theoretical models, research strategy, empirical results, and current and proposed studies. The reviews are primarily narrative rather than critical and intended to report chiefly on the current status rather than to give detailed accounts of past research. Several of his observations are especially helpful in providing a preliminary overview of these various research and conceptual efforts and are indicated below in outline form.

1. Super (et. al., 1963)
    a. Career: the sequence of occupations, jobs, and positions through a person's working life
    b. Research goal: the prediction of the career pattern as

opposed to the prediction of occupational choice - emphasizes development and is identified closely with developmental psychology

   c. Theoretical model: individual vocational preferences and career patterns as attempts to implement a self-concept

   d. Current theoretical effort: translation of the self-concept into occupational terms by means of an elaborate set of definitions conceived of as dimensions and meta-dimensions of the characteristic traits which people attribute to themselves

2. Tiedeman (this volume)*

   a. Current emphasis: theory above all else

   b. Objective: to specify how self-orientations arise and what orientations are associated with what life histories... a psycho-social model not yet described specifically

   c. Vocational development: the process of fashioning a vocational identity through differentiation and integration of personality as one confronts the problem of work in living

3. Roe (1956, 1957)

   a. Goal: specifying the dimensions of personality which distinguish the members of one occupation from those of another

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* Chapters 3, 4, 6, and 7 particularly note the directions which Tiedeman's work has taken. Kehas' emphasis on self concept as a dynamic construct, combined with Field's emphasis on the possibility of making dynamics specific to cause Tiedeman to re-examine his position on science as indicated in Chapter 6. This desire on Tiedeman's part has put the constructs into central place in the analysis of purposeful action.

   - b. Emphasis: personality and family background the heart of vocational behavior
   - c. Strategy: comparison of criterion groups on interview and life history data, psychometric tests, and projective devices...concurrent and longitudinal data on parental attitudes

4. Flanagan (_et_. _al_., 1962)
   - a. No explicit theoretical orientation
   - b. Implicit orientation a function of the psychometric characteristics of the data-gathering instruments...essentially trait-factor contingencies.

5. Holland (1959, 1964)
   - a. Theoretical model: (1) a typology of six personality types, (2) a model orientation for each such type consisting of coping mechanisms, personal traits, vocational and educational goals, life histories, aptitudes, and other attributes, and (3) a system for generating an index of the congruence between data obtained from any individual by means of interest scales and the model orientations
   - b. Criterion: choice of major field and vocation, change in same, achievement, creativity...

In discussing the various programs of research, Holland concludes with several observations, two of which emphasize that all are concerned ultimately with prediction, whether vocational choice, occupational membership and/or vocational achievement and satisfaction and that theory-building efforts have outrun the little research that is done...that, moreover, much of the theory which is written precludes confirmation. This overview of current statements indicates the wide diversity of opinion that exists among leading investigators with respect to issues of conceptualization and research strategy. Tiedeman and Super emerge as strong advocates of integrating conceptualizations, with Tiedeman holding for "theory above all else" and insisting that the personal act of choice be the focus of such efforts, while Super advocates a close link between first approximations toward an adequate theoretical orientation and on-going empirical work. Holland and Brayfield express strong reservations regarding premature and/or pretentious efforts "to ascent the lofty mountains of theory" or to "reify ego-centric variables", with Brayfield specifically advocating an intermediary enterprise of generating conceptual frameworks - similar, apparently, to the taxonomy which Borow (1964) has attempted. Several investigators adopt the strategy of advocating one specific conceptual orientation built into the data collection and analysis procedures characteristic of their research procedures. In addition to her taxonomy of occupations based on Maslow's system of personal needs, Roe gives primary emphasis to a straightforward research strategy designed to specify relevant dimensions of psychological differentiation among criterion groups. And, finally, Borow advocates greater familiarity with the logic of scientific method as a crucial prerequisite to more fruitful theory and research in Career Development.

Despite such wide diversity of current views with respect to issues of conceptualization and research strategy, convergent themes of emphasis are also evident. Three general trends or foci of convergence appear to be especially significant.

1. An increased emphasis upon longitudinal, developmental patterns characteristic of work as personal history, upon the pattern of individual lives as they develop through time, through a sequence of social roles (Super, 1953, 1957; Super, et. al., 1957, 1963; Tiedeman, 1961, 1964).

2. An increased emphasis upon personal investment in work activities, upon the individual capacity for commitment to instrumental activity...work viewed as ego-involving (Samler, 1961), as the implementation of a self-concept (Super, et. al., 1963), as purposeful human action within the context of the total division of communal labors (Tiedeman, 1964).

3. An increased emphasis upon individual patterns of choice (Tyler, 1959, 1964)...upon the process of choosing (Field, Kehas, and Tiedeman, 1963; Hilton, 1962; Fletcher, 1966)...upon the human capacity selectively to engage individual resources for purposeful activity (Tiedeman and Field, 1962).

The congruence of these three emerging themes suggests that current research in the psychology of occupational behavior is in the process of being actively influenced by those investigators who are particularly interested in careers as significant patterns of individual behavior expressed through personal styles of vocational adaptation. Current psychological approaches to research in career development patterns emphasize, in brief, an increasingly analytical regard for the general and progressive differentiation of psychological processes which characterizes human development and adaptation - an increased emphasis upon the nature and formation of personality structures facilitating the capacity to engage individual resources in the service of purposeful vocational activity. As a result, an increasing number of investigators seek to develop a more adequate analytical description of the "functionally autonomous"* quasi-permanent dimensions of character structure through which such processes of personal activity and thought integrate the actualities of individual need and quest with the realities of a social world of work. These researchers have, thus, begun to consider more explicitly broad conceptual and methodological issues regarding the nature and formation of psychological structure and the organization of thought processes - issues which are currently of central interest to an increasing number of investigators in a variety of fields. In particular, major research in the psychology of occupational behavior and patterns of career development gives increasing emphasis to the use of specific concepts from current ego psychology. It is this increasing regard for general conceptual issues concerning the nature and formation of ego structure and the organization of psychological processes which provides the specific theoretical context of my discussion.

In the next section we shall discuss in some detail and from a more general conceptual perspective what we view to be the central issues regarding the nature of personality structure and the organization of thought processes, central issues regarding ego integration or ego synthesis. In the section following that we shall focus specifically upon the nature of symbolic processes of imagination and their significance as dimensions of ego synthesis in the service of career development. In a concluding section we shall outline several implications of the general discussion, with particular emphasis upon indications for further emploration and application within the context of educational programs designed to facilitate the career development of prospective counseling psychologists and master teachers.

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* The phrase is Gordon Allport's (1937, 1961) and its usage in this context is consistent with our immediate purposes and meaning. However, we do not mean to imply, therefore, that we consider Allport's view of "functionally autonomous" behavior to be entirely consistent with current conceptual issues central to the nature and formation of psychological structure and processes of thought organization. We shall return to this matter in the following section of our discussion.

The Nature and Development of Personality Structure and the Organization of Psychological Processes:

Three Conceptual Issues

Human Development: Adaptive specialization and psychological differentiation. There are a number of psychological theories which focus upon the nature of human development as a process of progressive specialization of adaptive functioning (cf Chapter 8). Such developmental theories are, therefore, of increasing relevance to researchers in the psychology of career patterns. Despite the apparent diversity of such theories, an underlying congruence in their approach to behavior can be perceived: in each case a descriptive characterization of observed behavior (the emerging and sustained specialization of personality functioning) provides the conceptual basis for inferring a hypothetical construct (the development of a corresponding complexity of psychic structure - cf. Spitz, 1959, p. 14). These theories differ primarily with respect to the array of analytical principles by which an account is offered for the emergence of such specialization of function (such differentiation of psychic structure) from less differentiated, less organized, patterns of behavior. Hartmann (1939, _et al._, 1946) and Rapaport (1951-a, 1959, 1960-c) for example, invoke a complex interrelationship among (1) instinctual demands, (2) "structural givens",* (3) level of maturation, and (4) the "vicissitudes" of the environment. Erikson (1959) emphasizes an "epigenetic principle" of reciprocity between the maturing organism and the structure of its psycho-social environment. Spitz's (1959) notion of an "organizer" reflects a similar recourse to "embryological" parallels and analogies, while Allport (1961), Piaget (Flavell, 1963), Werner (1957) and Witkin (_et al._, 1962) all appear to share the basic assumptions of Lewin (1935) in that they emphasize the descriptive, cross-sectional, attributes of progressive differentiation and functional autonomy admittedly characteristic of normal psychological development without, however, providing explanatory principles regarding the processes through which such structural changes in behavior take place—without providing, in other words, an analytical description of the psychological process or mechanisms by means of which such integrated specialization of function emerges from less differentiated behavior.**

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*These "structural givens" (referred to as "ego-apparatuses") include (1) the psychic apparatus which forms memory-traces, (2) the threshold of tension tolerance, (3) the specific discharge capacities of affect and idea, and (4) the specific connection between an instinctual drive and its satisfying object (Rapaport, 1951, p. 692).

**This emphasis upon the descriptive and static aspects of behavior, and the concommitant neglect of a more dynamic or functional array of explanatory constructs, has been the focus of perhaps the most serious critical observations made with regard to psychology done in the tradition of Lewin (cf., Hall and Lindzey, 1957, Chapter 6; Zigler, 1963). While this criticism is perhaps least applicable to Piaget's "genetic epistemology", his description of formal operations remains incomplete in analogous ways. Piaget's "schema" of intellectual functioning reflect his essentially epistemological concerns. Neither his theory nor his procedures have been developed with

Some more analytical description of the process through which these structural attributes of psychological functioning develop would thus appear crucial to the present conceptual needs of those researchers who construe career development as the expression of stylistic dimensions of choice behavior. And in our view the first step toward meeting this need requires a more explicit analysis of the structural assumptions implicit in the ways in which we construe human development as a progressive specialization of psychological functioning. Therefore, we shall outline the general context and scope of analysis which, in our view, must be developed more explicitly if we are to clarify and resolve major conceptual issues implicit in our present notions of psychological structure, its nature, and development, and its relationship to processes of thought and imagination.

The concept of structure in the behavioral sciences. Structure is an ubiquitous word in current academic discussion. Both the range and depth of its major theoretical dimensions is suggested by recent studies dealing with "the structure of science" (Nagel, 1961), "the structure of scientific revolutions" (Kuhn, 1962), "the structure of psychoanalytic theory" (Rapaport, 1960-a), "the structure of behavior" (Merleau-Ponty, 1963), "syntactic structures" (Chomsky, 1957), "uncertainty and structure as psychological concepts" (Garner, 1962), and, finally,

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any particular regard for those dimensions of expressive behavior which represent organismic, perhaps covert, and under some circumstances, "non-veridical" dimensions of behavior (cf. Bruner, 1959; Flavell, 1963, pp. 440-442). For a comparison of Piaget's developmental psychology with that of psychoanalysis, a comparison which discusses in some detail the psychodynamic limitations in Piaget's work, see Wolff (1960) especially pp. 170-171. In this connection see also Spitz (1965), Appendix "the Geneva School of Genetic Psychology and Psychoanalysis: Parallels and Counterparts".

"structure in art and in science" (Kepes, 1965). Kepes suggests, in fact, that the concept of structure represents the unique substance of the intellectual vision of our time and, as such, represents a general notion to be distinguished from such related concepts as "order", "form", "whole", "system", or "Gestalt".

As would seem apparent from such a wide array of current inquiries and usages, the concept of structure can be viewed from a number of related and yet conceptually distinct perspectives. Among the various sciences perhaps the most general perspective, that of the "structure of science" itself, focuses upon the formal or logical pattern exhibited by scientific explanations (Nagel, 1961; Scheffler, 1963). From a somewhat different point of view, structure denotes the formal organization of dynamic components which comprise an integrated, functioning whole. Thus we speak of the anatomical "structure" of a bird, whether at rest or in flight. In this manner we emphasize persistant attributes of "birdness" somehow distinct from processes which take place "within" a bird as a biological system - or from the attributes of a bird's acts which constitute its perchings or flight. In other contexts, we speak of the "structure" exhibited by a cross-section of tissue taken from a living organism and viewed under magnification. We speak of a building as a "structure". From such a point of view the analytical distinction between "structure" and "function" entails a fruitful distinction between the spatial or static organization of a dynamic system and the temporal organization of processes which take place within that system.

The behavioral sciences, however, represent a systematic effort to establish relationships between or among events. Therefore the initial distinction between structure and function based upon a simple distinction between spatial and temporal foci of organization requires some modification when used in a behavioral context. The concept of structure within the behavioral sciences must, in other words, entail formal attributes of a temporal relationship among or between events, formal attributes that are analytically distinct from those similarly temporal attributes which represent "functions" or "processes" of behavior. Yet, as both Floyd Allport (1955) and George Klein (1959) persuasively argue, "the quest for a general, explicit concept of 'event structure' in the behavioral sciences is, despite its crucial theoretical importance, a difficult and incompleted task."

Bruner (1960, p. 7) suggests that "grasping the 'structure' of a subject is to understand it in a way that permits many other things to be related to it meaningfully - (that) to learn structure, in short, is to learn how things are related". When, however, the explicit subject of our concern is the structure of events which comprise complex patterns of behavior - as, for example, those manifested by a child's acquisition of speech or the integrity of processes of imaginative thought - several important dimensions of analytical distinction need to be made with respect to the "grasping" the "structure" and the "subject" to which Bruner refers.*

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*In the case of a "linguistic" analogue, we would have to distinguish at least between the structure or grammar of the language acquired and the structure of the process through which the language is acquired. The structure of this latter process would appear to involve the formation of implicit hypotheses regarding the grammar of the language to be acquired, hypotheses formulated on the basis of sampled cues, specific examples of speech, the generation of specific anticipations by means of such implicit hypotheses, and the revision of hypotheses and expectations on the basis of further experience (cf. Chomsky and Miller, 1963).

With respect to the general character of event structures manifested by the purposeful activity of individuals, we may perhaps assume, as Bruner does, that processes of cognition represent a distinctive dimension of such structure. We may assume, further, that such cognitive processes represent structured means "whereby a person achieves, retains, and transforms information" (Bruner, et al., 1956). We may assume furthermore that the need for an elaborated structure of such means for coping with informational diversity is essential to organized functioning, since the world of experience (the potentially discriminant attributes of our environment) appears infinitely complex, while our capacity to handle discrete bits of information within the normal constraints of directed activity is meager indeed (Miller, 1956). We may assume, finally, that such structured "means", while perhaps presuming "specie-specific" substrates of a biological nature (cf., Lenneberg, 1964), are acquired through a process of successive encounters and partial approximations (Sarbin, et al., 1960). Nevertheless two central theoretical issues remain: conceptualizing (1) the principles of such structures, the formal attributes of their hierarchic organization, and (2) the functional relationship between those structures and the processes whose activity they integrate. These issues with respect to the formal attributes of organized, adaptive, purposeful behavior are central to the program of researchers who explore career patterns as those patterns reflect the personal autonomy of individual actors. They are issues which remain central to the concerns of those who explore strategies and styles of coping behavior within all dimensions of environmental complexity or role expectation. They comprise, in other words, an area of central concern for those researchers who construe occupational behavior as a manifestation of personal styles of individual adaptation in the service of career patterning. They represent, finally, central theoretical issues which, implicitly reflect a crucial link between the psychology of purposeful action and the internal logic of our creative processes of imagination and ego synthesis. I shall outline several salient dimensions of the broader area of concern as the link with that area of inquiry.

Psychological processes and personality organization: Structure and function in the service of human adaptation. Dewey (1929, p. 62) makes a useful distinction between structure and function within the context of a more general philosophical discussion regarding a pragmatic theory of experience and inquiry:

> To designate the slower and the regular rhythmic events structure, and the more rapid and irregular ones process, is sound practical sense. It expresses the function of one in respect to the other... that fact is that all structure is structure of something. Anything defined as structure is a character of events, not something intrinsic and per se. A set of traits is called structure, because of its limiting function in relation to other traits of events...an arrangement of changing events such that properties which change slowly, limit and direct a series of quick changes and gives them an order which they do not otherwise possess. Structure is constancy of means, of things used for consequences.

Dewey's observations on structure and function are a direct reflection of his more general concern for a theory of inquiry or reflective experience as a process of progressive differentiation in purposeful behavior, a process of personal encounters which characterizes the adaptive resolution of a problematical situation. Dewey's central point of emphasis is that such a process of progressive differentiation of experience and behavior is teleological or functional in the sense that it represents an array of personal instrumentalities with respect to reaching or maintaining ends held either explicitly or implicitly. (Earlier, in his important paper on the "reflex arc concept in psychology," Dewey (1896, p. 261) emphasized that "stimulus and response are not distinctions of existance, but teleological distinctions, that is, distinctions of function, or part played, with reference to reaching or maintaining an end.")

Dewey's general perspective includes three major points which are of crucial relevance to our immediate discussion. In the first place, he provides a broad, philosophically sophisticated, context of analysis for clarifying the nature of the general, holistic orientation which characterizes the assumptions made regarding behavior by many who are interested in career development as a subject for research investigation: "The real beginning of our inquiry must," he emphasized, "be the (coordinated) act" (p. 254). In the second place, he emphasizes the functional nature of such coordination; he emphasizes the purposeful, teleological nature of a coordinated act. And, third, he emphasizes the need to provide an analytical description of such a process of coordination in terms of both process and structural concepts. He emphasizes, in other words, the need not merely to describe the structures through which such process of coordinated purposeful activity take place, but the need to explain the processes, the how such purposes develop and how they operate. In fact, the more general implication of Dewey's position is that the "how," the "process," represents a reciprocal dimension of the "what," the "structure."

This general analytical perspective with regard to the pragmatic context of events which characterizes human behavior is implicitly assumed by a number of important current theories regarding psychological functioning. For example, both Lashley (1951) and Hebb (1949), emphasize that an adequate description of behavior cannot be based upon the assumption of a quiescent or static system, but must, instead, begin with the assumption of a system which is already actively excited and organized, an organismic system characterized by continuously activated autonomous central processes. Bartlett's (1932) earlier contention that the perceptual process represents an "effort after meaning" which cannot adequately be described without reference to individual interests, attitudes, affects, and goals (as well as his suggestion that the array of personal schemas which represent an individual's internal organization of past experiences consists of an array of implicit hypotheses about the world, rather than an image of it) - this is a point of view we see reflected in a number of current positions regarding perception and cognition: Brunswik's (1943) "probabilistic functionalism," Bruner's (1957) description of cognitive strategies, Sarbin's (1960) conceptualization of "modular organizations," Kelley's (1955) notion of "personal constructs," Angyal's (1965) "system principles" and Miller, Galanter and Bribram's (1960) formulation of "TOTE units." The central implication of this general point of view is that human behavior reflects the serial approximations of an individual as he seeks to come to terms both with personal dimensions of need and organization, and with the structure of a public, objective reality which he can only know by virtue of the results of his actions directed toward it.*

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*Klein (1958) argues a similar point of view specifically with respect to perceptual processes: "Perception pursues meanings, not exhaustive accuracy or totality. The course of perceptual development is not so much that of achieveing the limits of discriminability or of exhausting the perceivable qualities of objects but one of developing a succession of working models of objects and events. The fact that most of our perceptions represent coor dinations with physical stimuli, as psychophysical studies repeatedly show us, must not keep us from recognizing that 'literal' perceptions are still selected perceptions" (p. 104).

Psychoanalytic ego psychology. The psychoanalytic theory of ego processes reflects a similar "functional" emphasis. Freud's (1923) initial systemization of the concept of the ego emphasized a coherent organization of mental processes defined in terms of their function, a central function of ego processes being the integration of instinctual demands of the organism and the reality demands of adaptive behavior. And while the original emphasis of psychoanalytic theory was upon those dimensions of such means-structures which defend the ego against instinctual demands (Reich, 1933; Freud, A., 1936), contemporary psychoanalytic ego psychology represents a sustained effort to specify the mechanisms of character structure which are reflected in processes of reality testing and adaptation (Rapaport, 1960-a). Hartmann's (1939) introduction of concepts such as "the conflict-free ego sphere," the "ego apparatuses of primary autonomy," "neutralization," "change of function," "structural delay," "anticipation," and "secondary autonomy" all contributed to greater theoretical clarity and substantially increased attention to the structural attributes of the dynamic equilibrium (1) between individual and environment, (2) of instinctual drives, (3) of mental intuitions, and (4) between the synthetic, integrating functions and the rest of the ego. As a result psychoanalytic theory today embraces a wide range of conceptual and empirical explorations of adaptive behavior, its structural attributes and its process dimensions. It includes exploration of:

1. Cognitive "schema": those "stable and enduring features of character structure which mediate between motivation and cognition" (Paul, 1959).

2. Cognitive "styles": "the extended modes of operation of schema

organization embracing such properties as complexity, stability, and temporal-sequential patterning" (*ibid*).

3. *Cognitive* "*controls*:" "generalized modes of coping with particular situational frameworks of task, stimulus - constraints, and intentions... those structural constants of our thought processes which condition and limit the influence of environmental forces and of tensions provided by motives...an individual's means of programming the properties, relations, and constraints of events and objects in such a way as to provide an adaptively adequate resolution of the intentions which brought him into an encounter with reality" (Gardner, *et al*., 1959).

4. The structural character of "*the perceptual process*" viewed from the perspective of a total cognitive act coordinated by systemic attributes of psychological functioning which mediate personal needs and public reality (Klein, 1956).

5. The development of *coping "strategies*:" "a child's individual patternings and timings of his resources for dealing with specific problems or needs or challenges...a concept which emphasizes the role of a function, the way in which a child uses a tendency...the child's direct and indirect efforts to handle reality in such a way as to reach his goal, to change the state of affairs to suit his needs...a concept which focuses attention on the purpose, function, and result of the behavior for the child" (Murphy, 1962, p. 283).

6. *Coping "styles*:" "the range and organization of the various coping strategies which characterize a child's efforts to come to terms with reality and his own needs" (*ibid*.).

7. The role of social reality in the *epigenesis of the human life*

cycle (Erikson, 1959).

8. The role of the dream process in ego synthesis (Erikson, 1954; Jones, 1962-a).

9. "Regression in the service of the ego:" (Kris, 1934; Schafer, 1954, 1958).

10. Regression as a principle of mental development and ego functioning (Freud, A., 1963)

11. Preconscious mental processes in creativity and mental health (Kris, 1950, 1952; Kubie, 1958; Eissler, 1962)

12. The relative autonomy of the ego from both internal drives and from external reality (Hartmann, 1939; Rapaport, 1958; Gill and Brenman, 1959).

13. The role of ideologies in ego identity, in life history and in history (Erikson, 1958, 1959, 1964).

Many of the various dimensions of these similarly functional approaches to behavior - as well as the conceptual issues which arise specifically with respect to the nature and formation of those personal means-structures which insure both continuity and flexibility of psychological function in mediating the demands of both internal and external reality - many of these issues are made explicit in Rapaport's (1960-a) effort to systematize psychoanalytic theory. In this statement, Rapaport makes a distinction similar to Dewey's when he indicates that "controls and defenses are conceptualized (in psychoanalytic theory) as structures (in the sense) that their rates of change are slow in comparison with those of drive-energy accumulation and drive-discharge processes" (p. 74).[*] Rapaport suggests, further, that "structures in general (defense-, control-, and means- structures) are the concepts which enable (psychoanalytic) theory to account for tension maintenance and tension increase, and not, as it generally supposed,...for tension reduction only" (ibid., p. 30). Rapaport indicates, in this regard, that whereas closed systems of physical energy are subject to the entropy principle, or second law of thermodynamics, the human personality as a structured system postpones and obstructs the operation of the entropic tendency (cf. von Bertalanffy, 1950; Holt, 1965). Thus, just as man-made structures (such as dams) delay this entropic tendency by preventing the expenditure of kinetic energy and transforming it into potential energy, so, Rapaport argues, the formation of psychic structure represents a transformation of psychological resources (ibid., p. 93).

The concept of psychological structure, or the structural point of view regarding psychological functioning has become the central focus of psychoanalytic ego psychology. The central issues with respect to this point of view include such questions as, "How can drives play so pervasive a role in the organization of psychic structures and yet our perceptions be as effective as they are?" (Klein, 1959, p. viii). However, as Klein also points out, "the concept of structure itself, for all its currency in contemporary psychoanalytic vocabulary, has not been subject to thorough theoretical scrutiny" (*ibid*., p. ix). Psychoanalytic theory, in particular, "fails to make an explicit distinction between the function regulated by a structure and the structure itself. Nor does it distinguish between the mode of energy organization involved in the building of a structure and the mode of energy organization employed by that structure" (Gill, 1963, pp. 113-115).

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*This similarity between a functional psychology in the tradition of James and Dewey and psychoanalytic theory as systematized by Rapaport is further suggested in very specific fashion by Rapaport's remarks concerning cognitive processes and cognitive structures:

> A distinction between cognitive processes on the one hand and the structured (patterned and persisting) tools of cognition and their organizations on the other can probably be made by the criterion of rates of change; the processes may be defined as showing a high rate of change, the tools and their organization as showing a low one. In other words, the processes are temporary and unique, the tools and their organizations permanent and typical. (Rapaport, 1957, p. 161)

These are precisely the distinctions which are the key to a conceptualization of thought and personality organization as constituting a hierarchical system. And yet, "while the process of structure formation is a central and crucial learning phenomenon, no explicit principles of learning or structure formation exist in psychoanalytic theory" (Paul, 1959, p. 149). The principles which govern the formation and specific operation of Hartmann's automatisms or Klein's styles, or Gardner's controls are still unspecified (cf., Rapaport, 1960-b). Indeed, "beyond its sketchily conceived notion of 'character defense' the traditional form of psychoanalytic theory is relatively poor in structural concepts that can account for individual differences in mental processes" (Gardner, 1959).

In a series of recent and influential publications Robert White (1959, 1960, 1963) attempts to confront directly the issues raised by these limitations in psychoanalytic theory. White asks, "How does behavior come to be guided by reality...how does a creature of instinct come to recognize the world that is there all the time, whether he likes it or not, and that follows laws of its own, whether he likes them or not?" (1963, p. 44 and 54). White contends that such a public, objective reality steals into the psychoanalytic account of the formation of psychic structure and that, furthermore, the formation of psychic structure is in psychoanalytic theory the unexplained consequence of the activity of energies (ibid., p. 57). White holds that "because psychoanalytic doctrine posits all psychic energy to be invested originally in the instincts, while the purposive, adaptive activities of the ego are clearly not instinctual, psychoanalysis has been unable to explain the sources of power behind the vital and enduring functions of the ego" (ibid., p. 1). He concedes that the psychoanalytic concept of "neutralization" represents an implicit acknowledgement that "the adaptive activities of the ego cannot be forced into the categories of instinctual aim." And yet, the notion that "energies originally distinguished by their instinctually determined aims can divest themselves of those aims" White views to be extremely tenuous and, furthermore, unnecessary, for he contends that "the psychoanalytic intention to be structural has not been supported by good ideas about the formation of psychic structure." And he suggests, in brief, that functionally autonomous, goal-directed, reality oriented, dimensions of behavior are more appropriately attributed to "independent ego energies," to energies which he construes to be inherent in the sensorimotor system of the organism from the beginning, and thus, structurally distinct from those dimensions of the organism which reflect directly the instinctual drive or need. White's main hypothesis is, in other words, that the human organism is equipped from the start with a kind of energy and with a kind of structure that disposes it to construct a stable, objective, real world...and that, furthermore, such an objective, stable world is constructed upon the basis of action. He suggests, in conclusion, that while "no real progress has been made in specifying the conditions under which the remarkable transformations of energy take place, independent ego energies can do everything that neutralized energies can do except to deneutralize themselves" (ibid., p. 196).

White's program, while it focuses upon what he terms "independent ego energies" is, as he acknowledges, intrinsically structural. That is, he posits an active human organism whose behavior is determined at the outset by a given structural relationship with its surroundings and which learns directly by virtue of the effect that its activities have upon that environment. As a result, White's strategy tends to reduce the sharp metaphorical distinction between "energy" and "structure" - for, as he points out, "If we conceive of structure as competence, we are giving it the dynamic character of patterns of readiness for future action" (ibid., p. 186).

And yet the important question remains to be faced. As White himself states it: "an explanation must ultimately be found for the many varied processes whereby the ego mediates between personal need and surrounding reality" (ibid., p. 5)..."the problem remains (thus) one of establishing a relation between the instinctual aims that Freud considered basic and a whole realm of behavior that does not seem to work in the service of these aims" (ibid., pp. 21-22).* And in this regard, White's notion of "independent ego energies" does not appear to provide any basis for generating those principles of ego functioning which serve to mediate between personal need and public reality, it fails to provide principles of analytical description of hierarchical transformations which integrate in some implicit manner the various dimensions of psychic functioning reflected on these distinctive levels of human nature and behavior. The crucial issue would seem to remain much as Rapaport himself states it, "to establish how (psychological) processes turn into structures, how a structure, once formed, changes and how it gives rise to and influences processes" (*ibid*., p. 99). This would seem to be the central issue with respect to any analytical description of personality, character structure, the organization of thought processes, and learning. It is the central issue which, in our view, emphasizes the general significance of symbolic processes of ego synthesis specifically in the service of personally determined patterns of career development.

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*It is this emphasis which White gives to the importance of specifying a relationship between instinctual aims and ego processes (an explanation of the varied processes whereby the ego mediates between personal need and public reality) which distinguishes his position from that of Allport (1937, 1961). Allport, while he emphasizes the descriptive attributes of "functionally autonomous" behavior, provides no basis for clarifying the relationship between those dimensions of psychological structure which sustain functionally autonomous behavior and those equally crucial dimensions of personality organization which Murray (1958, p. 185) has termed "functionally subsidiary."

Three recent assessment strategies which emphasize functionally autonomous processes of ego integration or ego synthesis and their role in the service of character structure are worthy of particular mention: (1) Kroeber (1963) has developed a valuable model for conceptualizing behaviors in positive as well as negative terms. Kroeber's model focuses on the operations of the ego and extends the concept of defense mechanisms to include behaviors that are "particularly relevant to an active, effective person dealing with demands, often conflicting, of a biological, psychological, or social nature" (p. 179). The core of his proposal is that the mechanisms of the ego can be thought of as general means-structures which may take on either defensive or coping functions. He suggests that, "for any given individual, situation, or time the ego mechanisms may be utilized in either their coping or their defensive form or in combinations of both" (p. 183). On the basis of this rationale Kroeber then provides specific criteria for distinguishing between the defensive and coping dimensions of behavior manifested by ten such ego structures: (1) Discrimination; the ability to separate idea from feeling, idea from idea, feeling from feeling; (2) Detachment; the ability to let mind roam freely, speculate, analyze, create, without restriction...; (3) Means-Ends Symbolization; the ability to analyze casual texture of experience, to anticipate outcomes, to entertain alternatives, choices; (4) Selective Awareness; the ability to focus attention; (5) Sensitivity; the ability to apprehend in direct relationships another's often unexpressed feelings or ideas; (6) Delayed Response; the ability to hold up decision, to timebind tension to non-commitment, complexity, or lack of clarity; (7) Time Reversal; the ability to replay or recapture experiences, feelings, attitudes, ideas of the past; (8) Impulse Diversion; the ability to modify aim or object of an impulse; (9) Impulse Transformation; the ability to appropriate some energy from an impulse by disguising it through symbolization as its opposite; and (10) Impulse Restraint; the ability to control impulse by inhibiting expression.

As Kroeber points out, these ten ego structures or mechanisms fall into three rough groupings: the first three pertain essentially to cognitive functions, while the last three pertain essentially to the structure of impulse economics, with the middle four something of a mixture. They reflect, thus, a continuum of psychological functioning between what in psychoanalytic theory is conceived as secondary process, reality oriented dimensions of behavior, on the one hand, and primary-process, instinctual drive, organized dimensions, on the other.

The source and structure of such ego mechanisms is, as Kroeber acknowledges, the crucial issue. Their relationship to those dimensions of motivational organization conceptualized by classical psychoanalytic theory and to those dimensions of a public reality emphasized by Hartmann and Erikson, Allport and White, is also recognized as a crucial theoretical concern. Kroeber's approach is similar to Allport's and White's in the sense that he attempts to provide a more specific description of those dimensions of adaptive behavior which reflect coping as well as defensive structures. His approach appears potentially more fruitful than that advocated by Allport or White by virtue of the fact that he seeks to make more explicit the continuity of behavior, the continuum of structural attributes of behavior which extends across instinctual and reality organized dimensions. His description appears to be least adequate at that point of the continuum where the transformation of instinctual energies becomes the central issue. Thus, his last three descriptive categories appear rather inadequate primarily because they attempt to deal with issues which require an analytical, explanatory strategy more than a descriptive one. In sum, Kroeber's major contribution here is in his ability to offer a useful descriptive clarification while neither obscuring nor denying the crucial explanatory task which remains.

Prelinger and Zimet (1964) have developed what they call an "ego-psychological approach to character assessment." Their approach consists of a set of descriptive criteria designed to "provide a theoretically relevant, reasonably exhaustive, and conceptually consistent framework for the organization and representation of an individual's habitual mode of bringing into harmony the tasks presented by internal demand and the external world." Their model consists of eight major categories or dimensions of psychological functioning reflecting a gross hierarchy of structural components:

1. Ideational style
2. Prominent affects
3. Prominent defenses
4. Superego
5. Adaptive strengths
6. Sense of self
7. Psycho-social modalities
8. Character elaborations

One innovation of their approach is that the specific ratings for which the schema provides are based upon interpretations of raw assessment data, rather than upon the data themselves - a procedure recommended by Schafer (1954):

> We need research designs that embrace rather than skirt the complexities of psychic functioning...one way to meet these complexities...is to use interpretations as our research units rather than scores... (p. 427)

Anna Freud and colleagues have recently published a "Profile" for the "metapsychological assessment of the adult personality" (Freud, et al., 1965). This profile, designed as a "framework for thinking" rather than a questionnaire scale or instrument, provides for the organization of clinical judgment relevant to the "age-adequate developments of internal structuralization and adaptation to the environment" (p. 10). Part V of the "Profile" directs attention specifically to the intrasystemic issues of "Drive and Ego-Superego Positions." While particular strategies are not specified, their outline provides a clear and generalized rationale for such specification.

Additional conceptual issues of important theoretical and practical concern regarding the structural dimensions of personality organization (with regard, therefore, to the elaboration of self as an agent of structure within the context of career development) are raised by the "relative" autonomy of such structural attributes. That is, additional issues are raised with respect to dynamic, "ecological" relationship that exists between such quasi-permanent dimensions of personality organization and an "average expectable" range of environmental stimulation and support (cf. Rapaport, 1958). We know, for example, that fundamental attributes of psychological functioning are radically altered under the impact of drastically modified states of sensory stimulation (Solomon, 1961). We realize, in other words, that psychological structures, once formed, require for their continuing stability and flexibility a level of continuous stimulation within definite limits (Klein, 1958). Furthermore, we realize that the enduring nature of such psychological structures--the range of their stability and flexibility--is determined to an important degree by the level of stimulation which characterized the environment within which they first emerged (Hebb, 1955). It would appear, therefore, that not only must our theoretical formulations of the structural dimensions of personality organization provide explanatory principles by means of which to account for the ecological dimension of their development (cf. Bruner, in Soloman, 1961), but those formulations must also include principles by means of which to account for the continuing range of stimulation required to maintain such structures, the range of stimulus "aliment" (Piaget) or stimulus "nutriment" (Rapaport) necessary to sustain them within a range of optimium stability and flexibility.

Personality organization and relative functional autonomy. All living processes represent highly complex patterns of activity organized on a number of hierarchically integrated levels. One of the most complexly organized patterns of such activity is represented by the behavior of an organism. Behavior is adaptive, it reflects the capacity of an organism to modify and to be modified by its environment. Human behavior is more complex still in that it is not only adaptive but, at the same time, intrinsically expressive. That is, in addition to its responsiveness to a public reality, human behavior reflects the nature and organization of psychological processes which represent its internal, organismic environment (Goldstein, 1939; Angyal, 1965). Human actions persistently manifest attributes which are neither random nor fully determined with respect either to an organismic and essentially private actuality, or to a social and inevitably historic reality. Thus, any analytical description of human behavior must, in Rapaport's words, come to grips with the "relative" autonomy of behavior from both internal, organismic drives of more specialized, more adaptive psychological functions emerge from less differentiated, less organized behavior.

Academic psychology has in the past been committed to theoretical perspectives and research strategies which emphasize covarient contingencies of "psycho-physical" relationships between the behavior of an organism and its immediate environment, at the expense of equal regard for those more complexly organized dimensions of personal functioning expressed in individual coping styles. As a result, the explanations of the learning process which academic psychology has generated have ignored the multitude and variety of such processes and their enduring forms (Rapaport, 1957). Clinical approaches to behavior have in the past tended to emphasize the immediacy of organismic, instinctual demands reflected by the personal, intrapsychic environment, at the expense of equal attention to the complexity of means structures by which such expressive dimensions of personal actuality are integrated with a public and historical reality. Current trends, however, reflect an emerging rapprochement between such partial psychologies as issues regarding the organization of those psychological processes which mediate between discrete orders of human functioning become of central concern to both academician and clinician. Thus while we have, at present, few answers with respect to the nature and formation of such psychological structures, we are learning to view the issues which they raise from the perspective of potentially more fruitful questions.

As a result of this emerging rapprochement we are now in a position to explore more effectively what remain as the three central issues with respect to the nature and development of personality structure and the organization of psychological processes of thought, imagination, feeling and action: (1) the formal attributes of psychological structure as a hierarchically organized system; (2) the dynamic relationship between such hierarchical structures of system organization and the various dimensions of psychological processes whose functioning they "direct"; (3) the organismic and ecological dimensions of support and constraint which determine their characteristic range of stability and flexibility - the twin relativities of their autonomous functioning.

The central assumption implicit to our entire discussion is that our generally tacit and distinctively human processes of imagination represent a dimension of psychological reality which emerges primarily in the service of integrating, through symbolic forms, the various and individually discontinuous levels of human experience and mental functioning.

The direct implication of this assumption is that our "symbolic processes of imagination" represent highly significant phenomena for psychological study if we are to understand more clearly the nature and development of those processes of ego synthesis which serve to determine a person's characteristic style of adapting in the service of both inner actuality and outer reality. In brief, the central thesis of my general discussion is that a more resourceful exploration of our symbolic processes of ego synthesis can provide the basis for clarifying the three central issues regarding the nature and formation of psychological structure and the organization of thought - that, therefore, they represent dimensions of psychological processes of central concern to students of personal styles in vocational adaptation. In order to explore this assumption more explicitly we shall review our present conceptual resources for specifying the nature of these symbolic processes and, in conclusion, suggest possibilities for their further exploration specifically within the context of an educational program designed to facilitate the career development of counseling psychologists and master teachers.

Symbolic Processes of Ego Synthesis

Critics of psychoanalytic approaches to behavior have frequently emphasized its preoccupation with the "depth" dimensions of personality organization and its serious neglect of the "reality" and significance of "surface" elements and configurations. On the other hand, "dynamically oriented" psychologists have documented the frequent neglect by many academic psychologists of the nature and extent to which the "depths" of human nature influence the character of its "surface." Clearly, what is required, and what appears to be emerging finally, is a more mutual realization that any analytical description of personality consistent with the full range, diversity and complexity, and intrinsic integrity of human behavior, must be a psychology of both surface and depth. More important, however, there must be increased regard for, more adequate formulations of, those dimensions of human action which reflect enduring, sustaining, flexible, and potentially creative processes which integrate "depth" and "surface" dimensions. In brief, what is required, and what appears to be emerging, is a psychology which gives appropriate emphasis not only to surface and depth but to surface and depth--to, that is, psychological processes of character synthesis. This need as well as new insights with respect to processes of personal integration are reflected in the development and the growing significance of psychoanalytic ego psychology.

Any general explanation of human action must, within the context of psychoanalytic theory, provide a systematic treatment from a number of related and yet conceptually distinct points of view (Rapaport and Gill, 1959). Psychoanalytic "metapsychology" (the theory of psychoanalytic theory) emphasizes that any formulation of human action which is to do full justice to both depth and surface - and to the relationships between - must provide a description of psychological processes on the basis of several related and yet distinct principles of analysis. These "metapsychological" principles or points of view include an original triad: (1) the "dynamic" principle or point of view which assumes that the "ultimate" determiners of all behavior are the instincts or drives, (2) the "topographic"principle which assumes that the crucial determinants of behavior are unconscious and (3) the "economic" principle which assumes that all behavior disposes of and is regulated by psychological energy. More recent developments in the theory of psychoanalytic ego functions gives central emphasis to a number of additional principles or points of view. These include the "structural" principle or point of view which states that instinctual drives are not the only invarient conditions of behavior but that, in addition, "ego apparatuses, like memory, perception, and motility" as well as organized systems of defense and coping strategies represent "structural givens ." In addition there is the "adaptive" point of view which emphasizes that all behavior reflects the relative and yet enduring realities of a public physical, psychosocial, and historical world. Finally what might be termed a combined "Organismic and Gestalt" principle assumes that the previous points of view refer not to separate behaviors but to analytically distinct and yet related dimensions or aspects of the same behaviors. In brief, all behavior is integrated and indivisible and reflects the impact of a multiplicity of determinants, both present and historical or "genetic" (Waelder, 1930, 1960). Thus, "any item of behavior shows a continuum of dynamic meaning reaching from the surface through many layers of crust to the core" (Erikson, 1954, p. 140) - and vice versa.

The "structural" point of view in psychoanalytic theory gives primary emphasis to those aspects of a mental process which characterize its function in the enduring, stable, organization of the mind as distinct from (1) the "dynamic" which emphasizes the interplay of psychological forces and (2) the "economic" which emphasizes the nature and transformation of psychic energies displayed by those forces.

This relationship between "structural," "dynamic" and "economic" dimensions of emphasis is reflected in the development of psychoanalytic conceptions of the ego. As "a subsystem of the personality...defined by its functions" (Hartmann, 1964, p. 114) the ego received its initial formulation within a "structural" point of view as the organ of defense, as an organized system of mechanisms for protecting the personality from anxiety (S. Freud, 1926; A. Freud, 1936). Thus the structural point of view originally gave primary emphasis to the ego as a subsystem of personality defined by its defensive functions in the service of dynamic issues.

Subsequent developments in theory gave increased emphasis to the ego as "the organ of adjustment" (Hartmann, 1939). This emphasis on "adaptation" clarified the ego's relation to reality as a subsystem controlling the apparatuses of motility and perception and thought and testing the potentialities and constraints of reality.

> Psychoanalysis includes in the id everything by which man appears to be impelled to function, all the inner tendencies which influence him.....The ego, on the other hand, represents the considered direction of man, all purposeful activity...Psychoanalysis, in so viewing the id and the ego, thus perceives man's being both impulsively driven and his being purposefully directed.
>
> (Waelder, 1930, p. 45)

Here the role of the ego in the development of a motivational hierarchy which transforms drives, periodic in nature, into a system of continuously acting motivations in the service of a forward-looking consciousness, reflects an integration of the earlier "dynamic" emphasis upon the role of defense and the subsequent emphasis given to the "structural" aspects of adaptation. Both the emphasis upon the ego as an organ of defense and as an organ of adaptation, however, limit conceptualizations of its functions to those which operate primarily in the service of such inter-systemic issues. Intra-systemic issues and the functions of ego integration, ego organization, and ego synthesis, remain to be clarified. For not only must the ego "come to grips with the demands of id, super-ego, and reality," but in addition, it must "integrate these three interdependent realms of mental functioning according to the principle of multiple function ." (Fenichel, 1945, p. 477). Thus the ego not only controls motility and perception and tests reality while defending against impulses, but, in addition, mediates between the various dimensions of intra-systemic organization and demand (Hartmann, 1939, 1964).

With an increasing emphasis upon the synthetic functions of the ego, psychoanalytic theory has given both "new depth to the surface" and new surface to the the depth of human action. It has confirmed Allport's earlier judgement that "our predecessors, who regarded psychology as the science of the soul, were not wrong in setting the problem of unity and personal relevance before us" (Allport, 1961). And yet, while the ego may always have been conceived as "a cohesive organization with a synthetic function of its own" (Rapaport) -

while "we observe at every turn that the ego simultaneously effects adaptation, inhibition and synthesis" (Hartmann) - it is equally true that "the full range of the synthetic functions is not yet known. We understand some of the unconscious synthetic factors but we know very little of the preconscious and conscious ones" (Erikson). Indeed, despite their crucial importance, "intrasystemic" issues in ego psychology are hardly even studied from a consistent conceptual position and research strategy. Erikson's "silent doings of ego synthesis" remain essentially unheard and frequently unheard of.

If "ego synthesis" is to be understood as the "inner captial" accrued from the successful alignment of appropriate experiences within each successive stage of human development," then we must look more closely at such a process, not only as it is reflected in the space/time patterns of psychosocial development but, in addition, within the more "structurally dynamic" dimensions of daily activity. If health, maturity, and the capacity to function in the service of both inner actuality and outer reality is to be understood as it is manifest and shaped through the learning processes implicit to our daily patterns of feeling and behavior - and as something more than a complete list of negative indices which have somehow been avoided - then, again, we must return to a focus on "structural dynamics." For, at present, "Our theory of inner psychological economy does not tell us what energy transforms the whole appearance of a person and heightens, as it were, his tonus of living" (Erikson, 1964, p. 162). If the inherent strengths and active qualities of ego synthesis in the service of human virtue are to be specified at the level of immediacy in human confrontation which is central to the vocations of education, counseling, and therapy, then we must return, again, to "the structural basis of man's functional unity" in order to consider its economic dimensions (ibid, p. 137).

Efforts to specify functions of ego synthesis reflect shifts in emphasis analogous to those with respect to intersystemic dimensions of ego structure. Indeed they appear to reflect shifts in emphasis at the most general or "metapsychological" level of conceptualization. The sequence appears to be (1)"dynamic," (2) "structural" and finally (3) "economic." And, as I shall conclude, the "economic" point of view would seem to entail a combination of "organismic" and "gestalt" emphasis with specific focus upon principles which might be termed "structural dynamics." Thus, Nunberg's initial consideration given to these intrasystemic functions of the ego was essentially descriptive in nature and emphasized the dynamic issues which they met:

> Our daily experience teaches us that in the ego also there resides a force that similarly binds and unites...its task is to act as an intermediary between the inner and the outer world and to adjust the opposing elements within the personality.
> (Nunberg, 1955, p. 120)
>
> The synthetic capacity of the ego manifests itself, then, as follows: it assimilates alien elements (both from within and from without) and it mediates between opposing elements and even reconciles opposites and sets mental productivity in train.
> (ibid, p. 122)

In brief, Nunberg's emphasis is upon what the synthetic function does, rather than upon how it does what it does, and within the psychoanalytic point of view the "what" is inevitably dynamic - the resolution of conflict.*

Except insofar as it appears to reflect the influence of Kris' thought, Hartmann's consideration of the "intrasystemic" dimensions and synthetic functioning of the ego remains essentially "structural." That is, he tends to focus upon those aspects of ego function which reflect the"fitting-together" of the personality and the real world. Thus his early statements regarding the synthetic function emphasize its role in adaptation:

> ...a person's stability and effectiveness are decisvely influenced by the purposive coordination and rank order of functions - in terms of adaptation, differentiation, and synthesis - within the ego...
> (Hartmann, 1939, p. 56)

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*Nunberg's thinking regarding processes, regarding, that is, the how of the synthetic functions, while but preliminary suggestions based on analogy with id processes, are highly intriguing:

> "We cannot make any final pronouncements or any very far reaching conjectures about the innermost nature of ego-synthesis. But even a superficial survey reveals a clear analogy to the id, to those of its components which strive to unite and to bind - in short, to Eros."
> (Nunburg 1955, p. 122)

In pursuing his analogy, Nunberg suggests that this same binding, integrating force is at once the source of scientific, artistic, and social work. Nunberg also suggests that this capacity on the part of the ego to resolve conflicts between the different parts of the personality can find its solution in a wide range of behaviors manifesting opposing principles. Thus he holds that, short of psychosis, the synthetic function of the ego is operating through sublimation, or change in character, or neurosis. Thus neurotic symptoms and character traits as well as what he terms an "epinosic" gain, are highly valued and strongly defended by the ego. Thus any educational or therapeutic process cannot be mere analysis but must be synthesis as well.

His later suggestions that the term"organizing function" be substituted for "synthetic function" (because the essential attributes of the processes denoted includes both differentiation and integration) appears to reflect this same structural, or adaptive emphasis.* When he considers more specifically these synthetic or organizing functions of the ego - when he raises "economic" issues of process - he invokes a concept of "neutralization" originally developed by Kris in his studies of wit and humor (cf. Hartmann, 1964 and Kris, 1952). Thus when the issues of process, the how of the synthetic function come to the fore - when the economic issues of psychic energy and their relation to structure, and the issues of change in function which create structures emerge - then the "economic" point of view becomes crucial to important "intra-systemic" formulations.

In order to review the various dimensions of possible focus with respect to intrasystemic processes of ego synthesis, we have traced them within the context of evolving psychoanalytic theory. Each of those successive stages or foci of emphasis, however, does not represent an entirely new addition to the general theory. In fact throughout Freud's writings, paralleling the general sequence emphasis which has been outlined (Hartmann, 1964; Rapaport, 1959) - in separate papers, chapters and footnotes - appear many if not most of the considerations which are receiving more detailed treatment today. We find throughout his consideration of the dream process, artistic creativity, folklore, myth, ritual, and drama, and the play of children, the basis of many subsequent elaborations of symbolic processes of imagination and ego synthesis. For this reason, in order to focus specifically on the "structural dynamics" of the ego's processes of synthesis - upon the how rather than the what of that process - we shall review several of Freud's original contributions to our understanding in this area.

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*Erickson's comments and insights regarding synthetic functions of the ego appear similarly "structural" in their emphasis upon the epigenetic dimensions of psycho-social fitting together. As Richard Jones has commented, one result is that we "do not quite get the epi into the genesis, we can point to 'genetic sequences', and to 'progressions from the organized and undifferentiated to the organized and differentiated'. But we still do not know what 'synthesis tendencies' look like." (Jones, 1962, p. 18)

In his paper "The Relation of the Poet to Daydreaming" (1908) Freud asks, "How that strange being, the poet, comes by his material and what makes him able to carry us with him?". And, like Socrates, Freud is inclined to conclude that "if we ask poets themselves, they give us no explanation of the matter - at least no satisfactory explanation".

Unlike Socrates, however, Freud proposes that were we able to discover in ourselves an activity which is somehow akin to the writing of imaginative works, we should then have the basis for some further understanding of this mysterious process which we assume to be represented by creative, artistic works. He suggests that we might begin such an inquiry by looking at the behavior of the child for the first traces of imaginative activity. And, since the child's best loved and most absorbing occupation is play, he suggests that, in order to understand the imagination of the artist - in order to better understand the nature of the creative process itself - we might begin by seeking a more adequate understanding of the nature of childhood play. Freud argues for the relevance of this strategy by pointing out that, since we never renounce any pleasure but merely exchange one pleasure for another and, since all children naturally play while only a few adults are artists, there must remain some behavior shared by all adults which links the childhood play of us all with the adult play of the artist. With this line of reasoning Freud suggests that the play of the artist which is concealed in the lives of other adults nevertheless persists in the lives of us all in the form of the daydream.

Freud then asks two crucial questions. First, why are some men, the creative artists, able to give form and expression to their most intimate fantasies while most other day-dreamers hide their fantasies through an apparent sense of shame? And second, how is the artist able to overcome our resistance to his publicized secrets in such a manner that we are able to enjoy his work?

These two questions Freud attempts to resolve in a manner consistent with the dynamic and economic principles of psychological functioning which he outlined earlier in the seventh chapter of The Interpretation of Dreams (1900). In brief, the thesis is that, on the one hand, the writer is able to soften the egotistical character of his own daydream by changes and disguises which offer a formal pleasure to those who would otherwise have an aversion to such expressions. This the poet accomplished by means of his talent which operates in much the same way that the dream work of our night time visions enables the ego to accept the material of the unconscious - material which, according to Freud, is expressed in the latent content of the dream. From this analytical point of view, the dream work enables the ego to retain control of unconscious mental processes (through disguises which translate latent dream material to manifest contents) at the same time that it enabls the psyche to benefit from the release of those ego forces previously required to control the unacceptable unconscious materials now expressed in disguised form. Freud concludes that in the relationship between the poet and his audience, it is the poet's creative talent which performs the "dream work".

Returning in 1911 to a reconsideration of "The Two Principles of Mental Functioning" - the basic distinction initially outlined in the final chapter of the Interpretation of Dreams (1900) - Freud suggests that art brings about a reconciliation of these two principles in a unique way. Thus, "the artist is originally a man who turns from reality because he cannot come to terms with (society's) demand for the renunciation of instinctual satisfactions...but who then in phantasy-life allows full play to his erotic and ambitious wishes". For with his special gifts, the artist, according to Freud, is able to mold his phantasies into a new kind of reality, and men then concede these fantasies a justification as valuable reflections of actual life, first because other men also feel the same dissatisfactions (resulting from the displacement of the pleasure-principle by the reality-principle) and also because these dissatisfactions are thus made a part of reality.

In his paper on "The Theme of the Three Caskets" Freud (1913) is primarily concerned with an analysis of the relationship between mythological materials and one specific theme which appears and reappears in many individual works of the poetic imagination. Since the analysis which Freud provides in regard to that relationship is based, in turn, upon his formulation of the various resources that the human mind has for resolving psychic contradition by means of simple replacement, we might also consider this paper to be relevant to the subject of our immediate concern. Thus, those processes by which a wished-for reversal can enable choice to stand in the place of necessity are again emphasized to be a triumph of the wish-fulfillment sought by both poet and daydreamer. By such a process Shakespeare, for example, is able to present simultaneously in the form of Lear's tragedy the three inevitable and yet mutually exclusive relations that man has with woman.

With Civilization and its Discontents (1930) Freud returns to consider in further detail the various palliatives by means of which men seek to make life bearable. In this work he suggests that, among man's various substitute satisfactions, it is important to distinguish between (1) those illusions which, like religion, serve to make man independent of the external world by providing support for a mass delusion and (2) those which are obtained from the illusions provided by the creative artist - those illusions which are, that is, recognized as such without the discrepancy between them and reality being either ignored or allowed to interfere with their enjoyment. And thus, with these concluding observations concerning the potential for communal satisfaction to be obtained through fantasy, Freud would appear to have returned to the perspective of his initial analysis provided by the paper of 1908 and, indeed, as outlined in the last two chapters of The Interpretation of Dreams.

As suggested earlier, Ernst Kris's studies of wit, humor, laughter, and art represent a major contribution to the "structural dynamics" of ego synthesis (Kris, 1952.) Indeed, in his discussions of (1) preconscious mental processes, (2)regression in the service of the ego, (3) neutralization, and (4) creativity he provides both a resourceful integration of conceptual issues and a wealth of unexplored implications and suggestions for further exploration.

Kris's (1934) paper on "The Psychology of Caricature" formulates a point of view regarding ego-functions manifest in the work of the imagination which anticipates major lines of development in psychoanalytic ego theory to date. In this seminal paper Kris points out that Freud's contributions to the psychology of the comic may be seen as consisting of two distinct emphases: (1) an early emphasis on topographical and economic relations outlined in Wit and Its Relation to the Unconcious (1905) and (2) a later period in which the emphasis was on dynamic and structural problems - problems which, in Kris's words, "Are part of the efforts made to arrive at a clearer view of the ego's position in mental structure" (ibid., p. 173). Thus the pleasures which we take in wit, caricature, and humor are dual - deriving in part "from a saving in mental energy", and in part "from the relation to infantile life". With respect to both of these dimensions of pleasure Kris suggests that, "In dreams, the ego abandons its supremacy and the primary process obtains control, whereas in wit and in caricature this process remains in the service of the ego" (ibid., p. 177).

> Whereas in dreams,...thoughts undergo distortion until they become quite unrecognizable; in wit - and, we may add, in caricature - the distortion is only carried through by half, and is subject to the ego's control; a thought is disguised rather than distorted, its distortion is pressed only so far as is consistent with its remaining intelligible to the firstcomer. (ibid., p. 180)

The crucial implication which Kris derives from this distinction is that, "The contrast between an ego overwhelmed by regression and a 'regression in the service of the ego' ...covers a vast and imposing range of mental experience" (p. 177). Kris argues, in other words, that "the ego's capacity to 'enroll' the primary process in its own service is not confined to the sphere of wit and caricature but extends to the vast domain of aesthetic expression...beginning with cult and ritual and permeating the whole of human life" (ibid., p. 177).*

In his 1938 paper on "Ego Development and the Comic", Kris recalls Freud's formulae: "The pleasure of wit originates from an economy of expenditure in inhibition, that of the comic from an economy of expenditure in thought and that of humor from an economy of expenditure in emotion" (Kris, 1952, p. 204). To such "economic" pleasures Kris would add those genetic gratifications derived from the pleasure of playful mastery through which a child first exercises his ability to come to terms with conflicts in his inner and outer worlds. Thus, "while the comic alone cannot overcome emotion for it presupposes a certain control over anxiety before it can become effective...wit brings freedom, and freedom wit" (ibid., pp. 212-213). In conclusion, Kris suggests that, in the form of the sublime, humor succeeds in "banishing man's greatest fear, the eternal fear, acquired in childhood, of the loss of love" (ibid., p. 216).

Kris's discussion of ego development and the comic includes two additional suggestions of central importance to the topic of this paper. First, he emphasizes the inevitable aggressive impulse which finds a controlled expression through wit, comedy, and humor. He implies, in this regard, that the capacity to neutralize these aggressive impulses through such controlled expression is a crucial determinant and expression of differentiated and enduring psychic structure. Second, he suggests that "as an invitation to...adopt a joint policy of aggression and regression", the comic represents a very fundamental dimension of group and communal structure.

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*In their paper on the historical development of caricature, Kris and Gombrich suggest that the first acceptance of "playful transformations of likeness marks the point at which for the first time in European history - the work of art is construed as a projection of an inner image - that the birth of caricature as an acceptable form of artistic and social expression marks the conquest of a new dimension of freedom of the human mind, no more, but perhaps no less, than the birth of rational science (Kris, 1952, p. 202).

In the 1950 paper on"Preconscious Mental Processes" Kris reconsiders the topographic distinctions which characterized the first twenty years of psychoanalytic theory. He offers a reconsideration in light of the more recently developed "structural", "economic" and "adaptive" points of view. Within this modified theoretical context Kris attempts to distinguish (1) between "mobile" and "bound" psychic energy, and (2) between two kinds of bound ego energy: (a) neutralized and (b) non-neutralized. Here Kris's subject is "the various delimitations and pathways between the id and the ego". His analysis of ego regressions (or "primitivization of ego functions") - in sleep, in falling asleep, in fantasy, in intoxication, and in the psychoses - emphasizes the possibility that such a process is a result of a voluntary and temporary withdrawal of cathexis from one area to another, a temporary withdrawal which enables the ego subsequently to regain improved control. With respect to this process Kris concludes:

> In ascribing to the ego the control of regression in terms of shifts in the cathexis of ego functions, (shifts) which can be related to or pitted against each other in various ways, we gain a frame of reference that might in the present tentative state of our knowledge prove useful in various ways...for example...it is generally assumed that preconscious thought processes become conscious by hypercathexis...We suggest (rather) that the hypercathexis of preconscious mental activity with some quality of energy withdrawn from the object world to the ego...accounts for some of the extraordinary achievements of mentation. Tentatively we assume that in preoccupation with fantasy the ego

> withdraws cathexis from some functions of the superego... It seems useful to consider in addition the possibility that the solution of problems - including all areas of creativity - affords pleasure through the discharge of neutral energy used in the pursuit of creative thinking... (thus) when our psychic apparatus does not actually act in search of some urgently needed gratifications we let this apparatus itself work for pleasure gain. We attempt to gain pleasure from its very activity. (pp. 313-314)

The 1952 paper, "Approaches to Art" provides a general summary of Kris's thinking regarding the psychology of the creative process. He begins by restating the important, inevitable questions. "What are those things which...tend to be endowed with the specific aura which the word ART conveys? What must the men have been like who made these things, and what did their work mean to themselves and to their public?" (p. 13). He relates the contributions of Freud to later theoretical developments provided by psychoanalytic ego psychology. He clarifies further his notion of "energy neutralization" and contrasts it with Freud's original concept of "bound" energy. He suggests, in addition, that the sublimation which is characteristic of all creative activity might prove to be distinguished by two characteristics: (1) the fusion in the discharge of instinctual energy and (2) the shift in psychic levels. He then reviews the structural dyanmic, and economic changes which seem to characterize what one might call the aesthetic experience. And finally he restates in a more generalized form his central thesis:

> The shifts in cathexis of mental energy which the work of art elicits or facilitates are, we believe, pleasureable in themselves. From the release of passion under the protection of the aesthetic illusion to the highly complex processes of recreation under the artist's guidance, a series of processes of psychic discharge take place, which could be differentiated from each other by the varieties and degrees of neutralization of the energy discharged. All these processes, however, are controlled by the ego, and the degree of the

> completeness of neutralization indicates the degree of ego autonomy...In assuming that the control of the ego over the discharge of energy is pleasurable in itself, we adopted one of the earliest, and frequently neglected, thoughts of Freud...the suggestion that under certain conditions man may attempt to gain pleasure from the very activity of the psychic apparatus. (p. 63)

Here Kris gives clear emphasis to three major dimensions of a coherent and general statement which can provide the basis for more detailed efforts to specify processes of ego synthesis in the service of individual styles of adaptation and expression in all areas of human action. There is, first of all, his focus upon concepts of energy transformation (the "neutralization" of aggression) entailed by the "structural" point of view in psychoanalytic ego psychology. There is, second, his emphasis upon the capacity of the ego to control, to autonomously permit, shifts in level of psychic functioning over a wide range of conscious and motivational states. And there is, finally, his suggestion that the control of the ego over the discharge of energy which accompanies such shifts in level of psychic functioning is experienced as pleasureable - his emphasis upon the intrinsic pleasure derived from the very activity of the mind when that activity manifests such shifts in level of psychic functioning. With these three contributions Kris outlined the direction in which psychoanalytic ego psychology must move in its efforts to conceptualize mediating processes of intrasystemic psychological functioning - symbolic processes of imagination in the service of ego synthesis.

Psychoanalytic approaches to such "transformational" dimensions of personality have been criticized on the basis that the theory rests on an inappropriate physical or economic analogy - a model of "exchange" solely within the limits of a predetermined level of human resources. For example, the use of hydraulic imagery in order to suggest the formation of psychic structures ("dams" which do not merely delay but which actually alter in character the discharge of impulse) - or the use of engineering imagery (the electron valve) to suggest an information network which controls the biochemical output of overt behavior - has been criticized by those who advocate a more "open system" approach to psychological functioning and the formation of personality structure (cf. Rapaport, 1959; Allport, 1961; White, 1963; and Holt, 1965). Unfortunately, however, many theorists, while emphasizing important limitations in existing formulations, suggest alternative conceptualizations which introduce other difficulties more serious than those which they intend to resolve. The emerging issues of "structural dynamics" in current psychological theory become most crucial and most evident at precisely that point where our various analogies become not merely suggestions of parallel processes and similarity within diversity but outright metaphors that do not mix well. It is in the act of mixing metaphors, however, that our processes of imagination can lead us to a more resourceful focus for exploring the structural dynamics of ego synthesis.

Implications and Applications

Our entire discussion attempts to explicate the assumption that man's symbolic processes of imagination represent the nucleus of our inner strengths, the expression of our central identity. Were we to assume, furthermore, that these distinctive and potentially creative symbolic processes of imagination are manifest throughout the full range of human action, then their exploration might proceed in a number of distinct yet ultimately related directions - as the spokes of a wheel radiate from a central hub. (cf., Werner and Kaplan, 1963; Knights and Cottle, 1960; Frost, 1931; and Dodds, 1957) For example, we might explore processes of symbol formation in art (Gombrich, 1960) or the philosophy of symbolic forms (Wheelwright, 1962; Langer, 1951; Whitehead, 1938; Cassirer, 1953-7). We might explore literature as symbolic action (Burke, 1941; Blackmur, 1952; Empson, 1951; Tindall, 1955) or myth, ritual, and drama as dimensions of symbolic process in the service of communal synthesis (Murray, 1960; Sebeok, 1958; Weisinger, 1956; Welsford, 1935). We might explore further relationships between the conceptualization of symbolic processes of ego synthesis outlined above and other current approaches to human creativity (Auden, 1956; Fraiberg, 1961; Hanson, 1961; Koestler, 1964; Taylor, 1964; Taylor and Barron, 1963; Weiss, 1952). We might consider also that mode of intellectual activity which inevitably generates "perspective by incongruity" and thus overturns all hardening of the categories in a comedy of ideas and presumptions.* With respect to the specific role of imagination in symbolizing personal styles of ego synthesis in the service of career development, however, more immediate dimensions of implication and application may be outlined.

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*See "Epilogue", chapter 15.

Freud emphasized the crucial role that imagination as a distinctive form of human mental activity plays in neurosis as a distinctively human form of illness. As Richard Jones has suggested, however, we might perhaps look more closely for the unique role of human imagination in adaptive growth as a distinctive form of human development (Jones, 1962a). Jones outlines a strategy "to facilitate the use of dreams as research material in 'growth' psychology by introducing a method which "addresses itself to the epigenetic structure of manifest dreams." He argues that "if we aspire...to study dreams not as sources of handy leads in therapy but as the overdetermined products of yet-to-be-charted ego functions (then)...it is their manifest versions that most appeal to scientific imagination" (ibid, p. 4). He thus returns to the psychology of the dream process (as distinct from that of dream interpretation) by shifting the emphasis from what dreams mean in terms of psychic dynamics to a more specific concern for the how of their meaning. He attempts, in other words, to explore the process of dreaming as a distinctive form of imagination in the service of ego synthesis. He adopts an epigenetic perspective with respect to the dream work as an imaginative process of symbolization on the basis that this dimension of current psychoanalytic theory represents the nexus of genetic, adaptive and structural points of view. His central hypothesis is that the dream manifests "a process of reconstructive activity...differentiating and re-integrating pre-adaptive epigenetic successes and failures in the context of and under the problematic pressures of phase specific re-adaptive crises" (ibid., p. 35). This hypothesis is based on the assumption that "eventual knowledge of ego synthesis will rest heavily on our ability to observe... shifting vicissitudes of phase specific and auxilliary organ-mode correlations" (ibid., p. 40). His illustrations of this epigenetic method of analysis are drawn from dreams reported by students participating in "an undergraduate course in educational psychology in which it is deemed appropriate for persons who aspire to guide the mental processes of others to confront themselves with their own" (ibid., pp. 43-44).

On the basis of these crucial points of conceptualization and strategy which Jones outlines, we would emphasize several additional issues for further exploration and application within the specific context of an educational program designed to facilitate the career development of counseling psychologists and master teachers.

1) First of all, we would recall Erikson's statement to the effect that "any item of behavior shows a continuum of dynamic meaning, reaching from the surface through many layers of crust to the core" (Erikson, 1954, p. 140; underlining mine). We would recall this emphasis with the suggestion that we consider more closely the possibility of extending our explorations to dimensions of daily thought and activity which presumably manifest, in a form parallel to that of the dream process, the immediacies of imagination in the service of ego synthesis.

2) Next, we would recall the central importance of focusing specifically upon the "structural dynamics" of such processes as ego synthesis - an emphasis which Jones supports as he notes the continuing need for a catalog of specific mechanisms. In this regard, we would perhaps be inclined to place the need for such a "structural dynamic" point of view as closer to the nexus of current theory than the epigenetic -

thus the synthetic functions may, for example, represent the ego's proximate guarantee of intrasystemic autonomy in relation to the demands of adaptive and genetic influence.

3) Finally, we would recall the efforts of those courageous educators who place our distinctively and potentially creative processes of imagination at the core of a truly liberal education (Frost, 1931; Jones, 1962b; Kaufmann, 1961; Kubie, 1958; Perry, 1963; Whitehead, 1938).

We would bring these three points of emphasis together in the suggestion that our efforts to specify the "structural dynamics" of symbolic processes of imagination might be advanced through an exploration of their expression in specific educational contexts. Thus, in conclusion, we suggest the possibility of exploring patterns of imaginative symbolization as expressed specifically in the service of student interaction among those who seek greater self-knowledge through group experiences designed to foster their career development as counseling psychologists and master teachers.

For additional specification of such a proposal, we return, again, to Kris:

> How extraordinarily rich in meanings the process of laughter is...it represents aggression and seduction simultaneously, it is associated with birth or rebirth and procreation, is the sign of godlike strength and so of godlike privilege, but is also the sign of the rebellion of the human race, and one feels continually forced to the conclusion that ultimately defense against anxiety, mastery of anxiety, and pleasure gain, are compressed together in the one act. (Kris, 1952, p. 233)

Kris suggests that "the shaping which the physiological act of laughter undergoes through the agency of the human ego is a clear and impressive example of the fact that everything which we recognize to be a process of giving form and shape to psychic material is to be regarded as an ego function" (ibid., p. 238) ...and that "laughter too, which lies on the border between expressive and purposive motor behavior, only acquires its meaning as an expressive action through undergoing this formative process in its nature and in the course it takes...(that) only because of the wide scope of its significance does it become human and in the Aristotelean sense peculiar to man" (ibid., p. 239).

And, in conclusion, we might ask with Kris, "How does it happen that an alliance is formed between those who laugh ," what are the various patterns of its development and expression as an invitation to aggress, regress, and/or caress in the service of individual autonomy and group collaboration? What are the dimensions of its expression as a symbolic process of ego synthesis within specific educational contexts provided to facilitate career development through self awareness? What are the relationships in "temporal sequencing" between those reflected in the integrity of the language of the human countenance and those required by "thematic extrapolative" approaches to career prediction? These and many other equally intriguing questions with respect to the role of symbolic processes of ego synthesis in career development might be explored within the immediate context of imaginative educational innovations in self-awareness through group processes.

Summary

This discussion considers the role that symbolic dimensions of imagination play in the development of personality and in the organization of thought processes. More specifically, the thesis is argued that our distinctively human and potentially creative capacities of imagination represent symbolic processes of ego synthesis which play a crucial role in those dimensions of personality organization which we seek to conceptualize as character structure, personal autonomy, or identity. The central implication of the discussion is that such symbolic processes of ego synthesis thus represent crucial dimensions of mental activity of particular significance to a psychology of personally determined career patterns.

A number of conceptual issues in the psychology of career development are reviewed, with particular emphasis given to those most relevant to the development of character structure and the organization of thought processes. Three major dimensions of conceptualization with respect to such personal "means structures" are emphasized: (1) the formal attributes of their system principles, (2) the dynamic relationship between such structures and the various psychological processes whose functioning they direct, and (3) the ecological aspects of their relatively autonomous functioning.

Symbolic processes of imagination as significant keys to the nature of character synthesis are considered within the context of psychoanalytic ego psychology, with emphasis given to a sequential patterning of relationships among a number of "metapsychological" points of view.

The several implications of this general discussion are brought to bear on more specific indications for an exploration of wit, humor, and laughter--highly significant and readily observable expressions of such symbolic processes of ego synthesis. In conclusion, a suggestion is made regarding the potential fruitfulness of exploring the significance of these particular dimensions of imaginative synthesis as they become manifest within the specific context of an educational program designed to foster the career development of master teachers and counseling psychologists.